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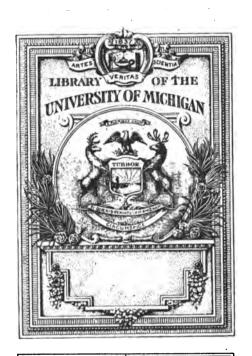
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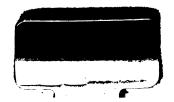
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# ANNUAL REPORT PHILADELPHIA 1891.





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Compliments of

# David R. Walker,

CHIEF OF ELECTRICAL BUREAU.

# FIRST ANNUAL MESSAGE

OF

# EDWIN S. STUART,

Mayor of the City of Philadelphia,

WITH

# ANNUAL REPORTS

OF THE

DIRECTOR OF THE DEPARTMENT OF

# PUBLIC SAFETY

ANI

CHIEF OF THE

# ELECTRICAL BUREAU

FOR THE

YEAR ENDING DECEMBER 31, 1891.

ISSUED BY THE CITY OF PHILADELPHIA, 1892.

PHILADELPHIA:

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## FIRST

# ANNUAL MESSAGE.

OFFICE OF THE MAYOR, CITY HALL.

Philadelphia, April 4, 1892.

To the Select and Common Councils

of the City of Philadelphia.

GENTLEMEN:—In accordance with the Act of Assembly approved June 1, 1885, entitled "An Act to provide for the better government of Cities of the first class in this Commonwealth," I have the honor to herewith transmit to your Honorable Bodies my First Annual Message upon the finances and general condition of the affairs of the City.

On Monday, April 6, 1891, I took the oath and assumed the office of Mayor of the City of Philadelphia, and thereupon appointed Mr. George Roney, Director of the Department of Public Safety, and Mr. James H. Windrim, Director of the Department of Public Works; the President and Members of the Board of Directors of the Department of Charities and Correction having been appointed by my distinguished predecessor for a term of five years, in accordance with the above Act, were continued in office.

On September 4, 1891, Mr. George Roney resigned the office of Director of the Department of Public Safety, and I appointed Mr. John Lamon, the then Superintendent of Police, as Acting Director of the Department, ad interim, and on October, 1, 1891, I appointed as the Director the present incumbent, Abraham M. Beitler, Esq.

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#### Finances.

I was met at the very commencement of my term of office with a financial calamity such as none of my predecessors had ever experienced. In consequence the greater part of my first official year has been taken up with complications growing out of the condition of affairs in the Department of City Treasurer, under the incumbency of John Bardsley.

On March 20, 1891, the Keystone National Bank, one of the active depositories of the City, suspended payment and closed its doors, the City having there then on deposit \$441,554.32, this at a time when a Committee of your Honorable Bodies had been in active examination and investigation of the administration of the Department of City Treasurer. The mal-administration of that Department had placed the financial affairs of the City in such a complicated and critical condition, that I deemed it my duty to appoint, under the authority in me vested by Section 1 of the above Act, a Committee of three competent persons to examine the accounts of that Department, and on May 21, 1891, I appointed such a Committee, consisting of Messrs. Taylor Faunce, Lawrence E. Brown and John S. Kuen. On the same day John Bardsley resigned his office. On May 23, 1891, the members of the above Committee made affidavit to the fact that they had discovered a misappropriation of public moneys by John Bardsley, and immediately a warrant was issued; that evening he was placed under arrest, and, subsequently, pleading guilty, was sentenced to imprisonment. On May 8, 1891, the Spring Garden National Bank, which was also a City depository, suspended payment and closed its doors, holding \$148,402.25 of the City's money. On May 26, 1891, Mr. John S. Kuen, one of the members of the above Committee, owing to the pressure of private duties, resigned his position. As his successor, I appointed Thomas W. Barlow, Esq., a member of the Philadelphia Bar, who continued to act until the Committee had completed its labors and made its final report, which final report was transmitted to your Honorable Bodies on October 3, 1891, having been preceded by a number of partial reports transmitted to you when and as received by me during the course of the examination by this Committee.

In my Inaugural Address I stated that if we expected the great improvements we so much desired we must have money, and money in an amount considerably exceeding that which we have had in the past.

On January 1, 1891, the Funded Debt was \$56,579,320.22; on January 1, 1892, the Funded Debt was \$56,701,320.22. This indebtedness will be reduced by the payment of \$2,741,500.00 of the six per cent. loan, and of \$400,000.00 of the four per cent. loan that matures this year.

The assessed valuation of property as furnished by the Board of Revision of Taxes, is as follows:

For the year 1892	\$735,696,772	00
For the year 1891	713,902,842	00
An increase of	\$21,793,930	

For the year 1891 there was appropriated to the various Municipal Departments \$16,484,027.01, and for this year, \$17,755,202.76, an increase of \$1,271,175.75; which is about the average yearly increase during the last ten years.

I had hoped to start upon the second year of my administration with greatly increased appropriations, in order that many of the permanent improvements contemplated by me could have been commenced, but was met with a deficiency from the year 1891 of over one-half of a million of dollars (\$522,645.80). To aid in making up this deficit I had to permit \$373,513.58 to be charged off from the appropriations to the Department of Public Works, for the year 1892 in order that there would not have to be returned to you all the appropriation bills for the year, that they could be scaled down, rearranged to come within the legal limit and be re-appropriated. This deficit in addition to the sum of \$1,015,384.80 which would otherwise have been available for this year, as

follows:—In Keystone National Bank, \$441,554.32; in Spring Garden National Bank, \$148,402.25, and School Fund, \$425,428.23, does not make, to say the least, a very encouraging outlook for the second year of my administration

If we are to have the permanent improvements we all so much desire and which we all agree should be commenced, we should have the money to perform the work, and the quicker we settle the problem as to how this money shall be raised, the earlier will we be able to start with these improvements, otherwise the same may be delayed for years to come.

There are two methods for providing the ways and means: one, by increased taxation, the other, by creating a loan. I most respectfully recommend to the earnest consideration of your Honorable Bodies, the question of creating an additional loan, in an amount which will provide for the improvements that the present condition of our City demands so that we may begin at once permanent improvements and progress as other large cities. If any loan is created I most respectfully recommend that it be made for and appropriated to three or four specific and very much needed improvements; first, the repaving of our streets with improved pavements upon a systematic and well defined policy, laid by the best and most improved methods, for I believe that one mile of pavement well laid is better than two miles improperly done; second, in the extension of our system of main sewers, and, third and fourth, in the extension of our gas and water Such improvements will, after being finished, benefit the future generations, and those generations should be required to bear their proportionate share of the cost, and the present not be required to pay for all. The other general improvements may be provided for gradually by the annual appropriations.

I also beg to respectfully recommend that you immediately consider the subject of refunding at a lower rate of interest the City's six per cent. loan, which, could it be accomplished, and I firmly believe it may, would save in interest a large amount.

#### DEPARTMENT OF PUBLIC SAFETY.

The Director of the Department of Public Safety has submitted a full and detailed report of the workings of his Department for the year 1891.

#### Bureau of Police.

During the year the Bureau of Police has been increased in efficiency by the addition of 102 patrolmen and the opening of new station-house at Twentieth and Berks street; a station and fire-house at Roxborough; a station, patrol and fire-house at Sixty-first and Thompson streets; a station and fire-house at Tacony; a station and fire-house at Sixty-fifth and Woodland avenue; alterations and additions were contracted for station-houses at Moyamensing avenue below Dickinson street; at Tenth and Taylor streets; at Germantown; at Front and Master streets, and at Twentieth and Fitzwater streets.

There was also purchased a lot at Front and Westmoreland streets upon which to erect a police and fire stationhouse. The new houses are now all completed and occupied, the improvements to the old ones nearing completion.

Much credit is due to this Bureau for the very vigorous and successful methods taken to suppress the illicit sale of liquor, the arrests for this offence numbering 514, being an increase of 297 over the year 1890. The arrests for lottery policy selling were seventy-four for the year 1891, as against nine for the year 1890.

## Bureau of Fire.

During the past year there were added to this Bureau eight men and five Silsby Rotary Engines, and if you continue the annual appropriations made for the past four years for a few years more, it will be thoroughly equipped with the newest and best apparatus. In the appropriation for the year 1892 you made provision for the purchase of a fire-boat, which will be the first in this City—such boats have been very successful

and of great benefit in other cities and no doubt will be here. We will enter into the contract for this boat at the earliest possible moment and hope in the near future to have it in commission. For faithful, courageous, and successful services I consider this Bureau second to none, and it should in the matter of the appropriations by your Honorable Bodies receive most careful and liberal consideration.

#### Electrical Bureau.

This Bureau has continued its rapid advances and maintained its reputation as the finest equipped, most practical and best managed Municipal Electric Bureau in this country, a fact admitted and conceded by all electrical experts.

During 1891 there have been successfully laid 8,624 feet of conduits throughout the different sections of our City. The report of the Chief shows that there are 1,871 arc lights in use, including 50 owned by the Girard Trust, and this year we will add 879 to that number, being 441 more than has been added before to the City's service in any one year.

One of the most important questions now before your Honorable Bodies is the one requiring the removal of the unsightly poles for over-head electric service. We are far behind the other large cities in this respect, and while the City herself has been gradually extending her underground service she has not been followed in any just proportionate degree by the private corporations. I most respectfully and yet earnestly recommend to your careful and deliberate consideration the advisability of enacting at once a general ordinance upon this subject, requiring the gradual removal of all poles and overhead wires and the placing of all wires underground. There is no valid reason whatsoever why this should not be done, and every reason, from the standpoint of the City's best interest, why it should. We must sooner or later meet this question, and there is no better time to commence this much needed improvement than the present. Every delay will make the accomplishment of this greatly desired result that much more difficult.

I respectfully recommend to your consideration the question of establishing for the City her own electric light plant. We could build and equip stations upon City property in various localities, and I believe eventually get not only a better service in every respect, but also have absolute control of all the lights that may be needed for street lighting.

#### Bureau of Health.

The report of the Bureau of Health shows the general condition of the health of the City to be good. The Municipal Hospital, as now located, is in a portion of the City in which improvements are being made very rapidly, and some measure must be taken at the earliest possible moment to remove this hospital to a location where it will not interfere with or retard the advance of improvements.

We have been afflicted for several years past with the sale of diseased meats within the City limits. The present Director of the Department of Public Safety has given the subject his careful and earnest consideration, and after consultation with the Board of Health has made a vigorous and determined effort to stamp out this growing evil. He recommended, and your Honorable Bodies gave him, an appropriation to organize a force whose particular duty it should be to investigate and prevent the sale of diseased meats. There is nothing so prejudicial to the health of a community as the sale of unwholesome food, and I am glad to state that by reason of the action of the Director of the Department the City is now comparatively free from such affliction.

## Bureau of Building Inspectors.

The report of this Bureau shows a decrease of permits issued and receipts since 1890: there were 4,272 permits issued, covering 9,142 separate operations, showing a decrease in permits of 210, and in building operations of 3,136; the total value of buildings and alterations authorized by permits being \$20,088,236.50.

#### Bureau of City Property.

This Bureau reports receipts during the past year of \$82,571.47 as against \$80,548.54 for 1890, being an increase of \$2,022.93. The City should own as far as practicable the various buildings occupied by her for municipal purposes, thereby saving the large amount now paid in rentals for the private properties so used. The Public Building Commission, by finishing with all possible rapidity quarters in which these Departments would be installed, would make an immediate saving to the City of many dollars, there being thus saved, in the removal of the Recorder of Deeds office to the City Hall, \$18,500.

The questions of erecting a new Morgue and of improving the City's property along the river fronts are both commended to your attention.

#### Bureau of Boiler Inspectors.

This Bureau still successfully continues its important work. The number of boilers inspected and approved during 1891 being 2,979; the number of certificates issued being 2,540; the number of new boilers 500, making under the supervision of this Bureau 3,334. There was paid into the City Treasury by this Bureau \$3,316.31, the amount earned over and above the yearly expenses.

#### DEPARTMENT OF PUBLIC WORKS.

The Fifth Annual Report of the Director of the Department of Public Works is herewith transmitted, presenting detailed statements of the great amount of important work accomplished, with also that which it is hoped to accomplish in the future, provided the recommendations of the Director meet with your approval and the ways and means necessary to carry out the same are provided.

#### Bureau of Gas.

The itemized statements of the receipts and expenditures of this Bureau will be found in the report hereto attached, as follows:

In 1891 the receipts were	3,774,072	09
In 1890 the receipts were	3,659,644	30
Being an increase of	\$114,427	79

Increased quantity of gas sold for which payment is not due is as follows:

1891, 40,601,900 cubic feet, at \$1.50	., \$60,902	85
1890, 14,538,694 cubic feet, at \$1.50	21,808	04
Which, added to the increased receipts	\$ 39,094 114,427	
Total increase over 1890	\$153,522	60
The expenditures for 1891 were	\$2,826,274	70
And for 1890 were	2,806,551	<b>42</b>
Being an increase of		
year 1891 of		

The amount of gas furnished free to the City during		·
the year 1891 was	587,398,328	cubic feet.
And in 1890	551,459,572	"
Being an increase during the present year of	35,938,756	"

This total amount of gas (587,398,328 cubic feet) thus consumed, if sold to the public at the present rate, would have placed in the City Treasury \$881,097.49. Economy in the use of gas by the Municipal Offices can only be enforced when you shall provide by ordinance that each Department shall pay out of its appropriation for the gas it consumes.

It is expected that with the completion of the Walnut street bridge there will be laid a new twenty-inch main thereon for sup<sub>i</sub> lying additional gas to West Philadelphia. This will then be connected with the present circuit of large mains laid during the past year. With the additional supply and the further extensions contemplated for that section there will be secured that which it has so long needed, and should certainly have, an adequate supply of gas.

One of the most important problems which confronts us now is the question of increasing as well as of improving our supply of gas. We have a contract with a private corporation for which you have appropriated \$500,000 for the purchase of gas manufactured in the plant located at the City's Twentyfifth Ward Gas Works. It is of the utmost importance that we should at once make arrangements to purchase this plant, in order that the entire control of the same will be in the hands of the City, and I beg to respectfully recommend that in the consideration given to this subject you shall appropriate money, not only to make such purchase, but also to hereafter extend the works that the City may make the necessary quantity of gas, instead of purchasing from private parties. The control of our supply of gas should forever remain with the City of Philadelphia herself, and should never be surrendered by either sale or lease. The experience of all other Municipal corporations has been where the gas works were owned by the City, and were afterwards purchased or leased by private corporations, there has always followed an endeavor on the part of such city to regain control of the same.

## Bureau of Highways.

The appropriations to this Bureau for the year 1890 for the repaving of streets not occupied by passenger railway companies was \$380,000.00, and for streets occupied by passenger railway companies was \$175,000.00, making a total of \$555,000.00. In 1891 the total for streets not occupied by passenger railway companies was \$405,263.75, with no appropriations for railway streets. On October 5, 1891, the Supreme Court of the Commonwealth of Pennsylvania handed down a decision affirming the opinion of the lower Court, declaring that passenger railway companies within the City

of Philadelphia must repave with improved pavements from curb to curb the streets they occupy. It was then too late in the season to begin any of this work. There have been several conferences between representatives of these various companies, the Director of the Department of Public Works, and myself, to arrange some general plan of action under which they should begin work, but as yet we have been unable to arrive at any conclusion.

If we do not arrive at a settlement of this question within a short time, I will submit, by special message, for your consideration the plan and recommendation of the Director for the prosecution of this work.

On December 15, 1891, I transmitted to you a communication upon the question of the repaving of Broad street with a new and improved pavement. You have already appropriated for the year 1892 enough money to start and partially finish this improvement, and I most sincerely trust that you will appropriate the balance of the money necessary to complete this great work, which, when done, will give us one grand highway with an improved pavement extending from the northern limit to the southern limit of the City, a distance of thirteen miles, connecting many of the streets which have already, from time to time, been so repaved.

The Belgian blocks with which this street is now paved will be utilized in paving adjacent streets now paved with cobble stones, these cobble stones being utilized as a foundation for the improved Broad street pavement. I most respectfully refer you to the recommendation of the Director in his report, hereto attached. He has given much time and study to this important question, and his recommendation, if carried out, would solve the question of good and well-paved streets, a matter in which every citizen is most directly interested.

## Bureau of Street Cleaning.

The work of this Bureau during the past year has been very satisfactory; the number of complaints being 257 less than in the previous year.

A new policy was inaugurated in asking for bids for the removal of garbage, waste, etc., by disposing of it on dumps, as heretofore, and also by cremation. The bids for the latter system, however, were found to be too expensive for the appropriation available. I recommend that the City shall erect upon her own land crematories and grant the contractors the privilege of using them as a condition of their contract.

On account of the growth of our City and the improvements already made, in what is now our suburban district, the territory in which deposits of waste and offal can be made is rapidly becoming limited, and in consideration of the great distance it will eventually have to be carted, I beg to recommend to your early attention the question of determining how to dispose of the same.

### Bureau of Lighting.

The expenses of this Bureau must necessarily increase each year upon the annual extension of the public lighting. number of electric arc lights in 1890 was 1,293, and in 1891 was 1,719, an increase of 426 over 1890; the number of gasoline lamps in 1890 was 7,160, and in 1891, 7,911, an increase of 751. The total number of electric, gas and gasoline lamps now under the charge of the Bureau of Lighting in 1890 was 28,013 as against 30,141 in 1891, an increase of 2.128. This statement presents additional support to my argument recommending that the City at the earliest possible opportunity erect and control her own electric light plant for Muni-Each additional arc light upon the public cipal purposes. highway is not only a convenience to the citizens generally, but is also of material aid in the prevention of crime.

## Bureau of Surveys.

There has been built within the last year 20 main sewers, 3 sections of the Wissahickon High Level sewer, 1 section of the intercepting sewer, in all 36,102 linear feet.

The Westmoreland street section of the Aramingo Canal system has been completed from the Canal to the Delaware river. The Department has under contract four sections of the High Level Intercepting sewer along the Wissahickon valley, and it is expected these extensions will be completed by summer. There was also 133,216 linear feet of branch sewers built, and 23,465 linear feet of branch sewers built under private contract. There is still a great deal to be accomplished in this important branch of public work which is so closely connected with the health of our City.

The Walnut street bridge is approaching completion and work is progressing thereon very satisfactorily. With additional appropriations for the completion of the road bed of the river spans, the railings and general finish, this bridge can be open for public travel in the latter part of this year.

I beg to also call your special attention to the condition of the bridge continuing Girard avenue over the Philadelphia and Reading Railroad, and the timber bridge over the Schuylkill river at the Falls. The repairing of these bridges, on account of their condition, is practically impossible, and the question of their reconstruction should receive your early attention.

#### Bureau of Water.

On October 8, 1891, I transmitted to your Honorable Bodies the report of the Director upon the future water supply of our City, and I beg to again call your attention to this report, which was made after a most thorough and exhaustive study of the subject.

The total increase of the number of gallons of water supplied during the last five years has been 23,238,868 235 gallons; the consumption during 1891 was 140 gallons per day per capita. Strange to state, while this has rapidly increased year by year, we have to-day no greater pumping capacity than we had in 1887. It was impossible during the past summer, to keep the East Park Reservoir filled to

its entire capacity, the depth of water only averaging 12 feet, which is 13 feet less than can be stored therein. This has been caused by our limited pumping capacity, which will be very materially improved by the 1st of July next, when we expect to have completed and in service the new 20 million gallon pumping engine contracted for with the Southwark Foundry and Machine Company by my distinguished predecessor. This would, however, have still left our pumping capacity inadequate, and on October 8, 1891, in a special message, I also presented the necessity for additional pumping engines and urged still further appropriations to remedy this very dangerous and long-continued defect in our water system.

By reason of the appropriations for 1892 the Department will contract for an additional 20 million gallon engine for the Spring Garden pumping station; a 10 million gallon engine for the pumping station at Belmont; a 10 million gallon engine for the Roxborough station; a 15 million gallon engine at the Frankford pumping station at Lardner's Point on the Delaware river. With these additional facilities we will be able to store in the reservoirs now finished a much larger quantity of water and permit it a longer time in which to subside before supplying it.

The new Roxborough reservoir, which will have a capacity of 148 million gallons, intended for supplying the Twenty-first and Twenty-second Wards and that portion of the Twenty-eighth Ward above Westmoreland street, we will have finished during the present year. This, with the reservoir already there, will afford such storage capacity as to provide at all times an ample supply of subsided water for the above District.

The most important question decided this year was the selection of the Indian Queen Lane site, for a storage reservoir to supply the entire northwest section of the City, which has a population of upwards of 250,000 people now, and is rapidly increasing. This section is, and always has been,

supplied by water from direct pumpage. For two years the Water Committee of your Honorable Bodies has been considering the question of selecting a site in this very important district, and now that the question has been decided, it is due to the health and comfort of the population living in that section that you immediately make an appropriation which will enable the Department to start the work on this reservoir, which has been much too long delayed. There is no question in connection with the water supply that demands greater and more immediate attention than this.

The next matter in importance for your early consideration is the question of building a reservoir in the West Park to supply the present demands of West Philadelphia and those of the future which will be made necessary by the rapidly increasing population.

As previously stated, all moneys spent for reservoirs is a permanent investment; they will always be available no matter from whence may come the future water supply of our City.

I also most sincerely trust that you will very carefully consider the practical and throughly sound recommendation of the Director of the Department of Public Works upon this entire question of our water supply, as made in his report herewith transmitted, which I beg to state has my unqualified and entire approval.

#### DEPARTMENT OF CHARITIES AND CORRECTION.

I beg leave to call to your attention the able and comprehensive report of the President of the Board of Directors of the Department of Charities and Correction, herewith transmitted, showing in detail the great amount of work in the way of permanent improvement that has been accomplished during the past year.

On November 12, 1891, the new buildings for the Insane, after a thorough inspection, and upon the Architect's certifi-

cate, were accepted by the Department. The total cost of these buildings, including steam heating, and fixtures for electric and gas lighting, and the laundry building, was \$236,344.53.

Included within these buildings is one main dining room, in which all the insane patients may be fed at one time. This dining room is as perfectly arranged as any in the country.

I beg also to call to your attention the very interesting and exhaustive description of all of these buildings, made by the President of the Board, which is hereto attached, and also to call your special attention to the many other suggestions, recommendations, etc., in the accompanying report, all of which have for their ultimate purpose the improvement of the condition of the unfortunates whom our City has to care for, in the two Bureaus in the Department, the Bureau of Charities and the Bureau of Correction.

The ordinance just passed, placing upon the City plan a Boulevard will be of advantage and benefit to the citizens generally. I most earnestly recommend that you consider the advisability of providing at the earliest moment the necessary appropriation for commencing this great public improvement, that it may be pushed to completion with all possible dispatch, and, as it will be the principal approach to Fairmount Park, it should be made the most beautiful and attractive.

I have the honor to also transmit herewith for your consideration the Annual Reports of the following Departments:

Receiver of Taxes,
City Treasurer,
City Controller,
Law,
Education, and
Sinking Fund Commission.

There ends to-day another municipal year—the first of my administration. During that time much that has been of detriment and of disadvantage to the good name of our City has occurred, yet material progress has been made in bettering her condition and advancing her toward the foremost place among other great cities. Many improvements in the public service have been inaugurated and successfully established, and much in the way of permanent improvements has been added to our City's prosperity.

We are starting upon a new municipal year, and while despite the misfortunes of the past twelve months much was accomplished for her good, there yet remains very much more to be undertaken.

The people expect, and properly, too, that careful, considerate, and conscientious administration of public affairs from you, the Legislative, and me, the Executive Branch of the Municipal Government, which will assure and advance the best interests and material welfare of the City of Philadelphia.

To that end let us both bend our earnest thought, our best endeavor, our every energy, that at its close we may merit and receive the approbation and commendation of our fellow citizens.

I am,

Respectfully,

EDWIN S. STUART,

Mayor

# ANNUAL REPORT

OF THE

# DEPARTMENT OF PUBLIC SAFETY,

FOR THE YEAR ENDING DECEMBER 31, 1891.

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## **OFFICERS**

OF THE

# Department of Public Safety.

December 31, 1891.

# Director, ABRAHAM M. BEITLER.

SECRETARY—JAMES HOYT.

BOOKKEEPER—HIRAM HORTER, JR.

MESSENGER—ROBERT CROUSE.

## Chiefs of Bureaus:

POLICE—JOSEPH M. SCHOOLEY, Acting Superintendent.
FIRE—JOHN R. CANTLIN.
ELECTRICAL—DAVID R. WALKER.
BUILDING INSPECTORS—WILLIAM GILLINGHAM, President.
BOILER INSPECTION—JOHN OVERN.
CITY PROPERTY—A. S. EISENHOWER.
HEALTH—WILLIAM P. TROTH, Chief Clerk.

# FIFTH ANNUAL REPORT

OF THE

# DEPARTMENT OF PUBLIC SAFETY.

Philadelphia, February 1, 1892.

HON. EDWIN S. STUART,

Mayor of Philadelphia.

SIR:—In accordance with Act of Assembly I herewith submit a summary of the operations of the Department of Public Safety, together with the reports of the Chiefs of the several Bureaus embraced therein, for the year ending December 31, 1891.

I assumed the duties of Director on 1st October, 1891. Much of this report, therefore, has to do with the operations of this Department under Hon. William S. Stokley, who was Director until April 6, 1891, and under George Roney, Esq., who was Director from April 6, 1891, until September 4, 1891; and under John Lamon, Esq., who was acting Director from September 4, 1891, until October 1, 1891.

Necessarily my views are based upon but a short term of service. Since my appointment, however, I have given to the mastery of the details of the Department earnest study and unremitting labor.

## Bureau of Police.

During the year 1891, the Bureau of Police was increased in efficiency, one hundred patrolmen being added by the ordinance of December 31, 1890, and two by the ordinance of June 30, 1891.

New buildings were contracted for as follows:—A station house at Twentieth and Berks streets; a station and fire-house at Roxborough; a station, patrol and fire-house at Sixty-first and Thompson streets; a station and fire-house at Tacony; a station and fire-house at Sixty-fifth and Woodland avenue; and alterations and additions were contracted for to station-houses at Moyamensing avenue below Dickinson street; at Tenth and Taylor streets; at Germantown; at Front and Master streets, and at Twentieth and Fitzwater streets.

In addition a lot was purchased on Front street above Westmoreland street for a police and fire station.

The houses contracted for are all completed or approaching completion.

The one hundred and two patrolmen allotted for 1891 were distributed as follows:—

Second District	10
Third District	2
Fourth District	2
Fifth District	4
Seventh District	2
Ninth District	4
Thirteenth District	5
Fourteenth District	6
Fifteenth District	10
Sixteenth District	10
Seventeenth District	4
Eighteenth District	6
Twenty-first District	8
Twenty-second District	8
Twenty-third District	2
Twenty-fourth District	9
Twenty-fifth District	4
Twenty-sixth District	4
Reserves	2
Total	102

There were no additions to the Patrol Service during 1891. This most useful branch of the service will, however, be added to during the coming year.

The Mounted Service was increased during the year 1891 by the addition of seven men, making a force on December 31, 1891, of thirty-four officers and seventy-nine men, distributed as follows:

Thirteenth District	10
Fourteenth District	25
Sixteenth District	11
Seventeenth District	5
Twenty-first District	11
Twenty-second District	
Twenty-fourth District	
Twenty-fifth District	
Twenty-seventh District	
Total	113

Two matrons were appointed in 1891.

The following Districts now have matrons:—Reserves, Second, Third, Fourth, Fifth, Sixth, Eighth, Thirteenth, Seventeenth, Eighteenth, and Nineteenth Districts.

In anticipation of the completion of the patrol house at Front and Master streets, the telephone service was introduced into the Tenth and Eleventh Districts.

The following was the force on duty on December 31, 1891:

Superintendent	1
Captains	. 4
Lieutenants	30
Sergeants	71
House-Sergeants	80
Patrol-Sergeants	28
Patrol Officers	28
Patrol Drivers	28
Patrolmen	1,527
Matrons	11
Pilots	4
Engineers	4
Firemen	4
Fire Marshal	1
Police Surgeon	1
	-

District Surgeons
Chief of Detectives
Detectives
Superintendent of Vans
Van Drivers
Hostlers
Cleaners
Chief Clerk
Assistant Clerks
Central Station Clerk
Messenger

Some detailed figures from the reports will show the amount of work done by the Bureau during the year 1891.

The total number of arrests during the year were 53,184, an increase of 4,036 over the preceding year.

The arrests for intoxication and disorderly conduct were 24,785, an increase of 124 over the preceding year.

The arrests for selling liquor without a license were 514, an increase of 297 over 1890.

The arrests for lottery policy selling were 74, as against 9 for 1890.

For vagrancy the arrests numbered 4,206, against 3,311 for 1890; 127 arrests for highway robbery were made in 1891, against 88 in 1890.

A study of the lists will show that during 1891 the police force was vigilant in protecting the citizens and their property against the criminal and vicious classes.

During the year 8,312 vacant houses were at different times under the care and protection of the Bureau. Of these ten were entered and property to the value of \$565 was taken, of which \$325 was recovered. Three of the housebreakers were arrested and convicted.

It will be noticed that a diligent effort has been made to break up the illicit sale of liquors. The licensed vender, appreciating the value of the license, and knowing that his continuance in the business depends on a strict compliance with the law prohibiting sales to minors and to intoxicated persons, avoids violating the liquor laws. The unlicensed vender, the "speak-easy" proprietor, must make his profit from indiscriminate sales. The effect of the determined effort to stamp out these unlicensed saloons is shown in the decrease of arrests for intoxication and disorderly conduct. In 1890 the arrests on these charges were 3,724, while in 1891 they were 8,278, a decrease of 446. A more stringent law which will stamp out the clubs, which are run only for the sale of intoxicants, will still further diminish the arrests from this cause and do much to insure the peace of the city.

The Detective Squad during the year recovered and restored to its owners property valued in all at \$39,318.22.

The total value of the property recovered by the Bureau was \$129,313.07.

In connection with the operations of the Detective Squad the necessity has been made apparent for the services of a clerk.

While photographs of noted criminals are taken and preserved in the detective rooms, together with a physical description of each, yet the Bertillion, a French system, adopted already in several American cities, is so much better than any heretofore in vogue, that I deem it of the utmost importance that the system should be adopted here as soon as possible. In conjunction I hope to have the Public Building Commission equip for the Police Bureau a Photographic Gallery in City Hall, wherein the photographs may be taken with more secrecy and security than is at present possible.

The appropriations and expenditures of the Bureau were as follows:

Amount appropriated for the year 1891  Disbursements	
Balance merging	<del></del>
The receipts from all sources were .	. <b>\$</b> 997.24.

#### Fire Marshal.

The number of fires during 1891 were 1,327, a decrease of 39 as compared with 1890; but the fire losses reached the enormous aggregate of \$2,657,235, an increase over 1890 of \$1,154,456. While most of the increase is due to a few large fires, the figures invite study and are convincing that the question of an early transmission of an alarm from a fire is to-day of primary importance. Philadelphia has an elegantly equipped fire brigade, an electrical service scarcely to be improved on, and in most sections an abundant water supply for fire purposes. With these appliances the question of keeping down the fire losses resolves itself into the question of getting the fire apparatus on the ground at the earliest moment after the fire has started. Various devices, in the way of automatic and pneumatic alarms, have been brought to the attention of the department and are to-day receiving careful attention, and being studied and inquired into by the department, and by the fire underwriters, to the end that those may be adopted which will best accomplish the result desired. It is earnestly to be hoped that some appliance may be found, and generally adopted, which will bring such speedy intelligence of a fire to the fire houses as will enable the fireman to grapple with every fire at its very inception. With the Fire Bureau maintained at its present state of efficiency the annual losses would be very much diminished.

There were 13 arrests for arson during the year. They were all tried. The prosecutions resulted in 7 convictions and 6 acquittals.

## Bureau of Fire.

During 1891 the efficiency of the Bureau was increased by the addition of eight men and the purchase of five new Silsby rotary engines. The universal verdict of those familiar with steam fire engines, and having to do with the Bureau, is in favor of these engines. They do their work well, are rarely out of order, and are light and easily handled. If Councils will continue the annual appropriations made for the past four years, for a few years more, the Bureau will be thoroughly equipped with the newest and best apparatus.

The policy of replacing old and dilapidated buildings, used for fire stations, with new and modern houses ought to be continued, and, as rapidly as the finances of the City will permit, leased buildings should be abandoned and lots purchased and houses erected thereon by the City. The buildings now belonging to the City are kept in repair by the Bureau, and many of them are models of convenience and comfort. The men employed in the dangerous and hazardous business of putting out fires should be well and comfortably housed. The Chief Engineer's recommendations as to a new house for Engine No. 17 and for a truck near City Hall, are deserving of special mention, and will be pressed upon Councils when next year's appropriations are being considered.

The two police boats, the William S. Stokley and the Samuel G. King, have rendered efficient service in the fires near the river fronts. The "Stokley" needs extensive repairs. As far as the appropriation will permit these will be made, but it is a question worthy of the careful consideration of Councils whether it would not be economy to dispose of this boat and build a new one with more boiler capacity and larger and better pumps.

The "King" is equipped with a large Silsby pump, but the boiler will not generate enough steam nor with sufficient rapidity to work the pump to its full capacity. If it is possible to secure the money during the coming year to put in a new and better boiler it will be done.

The new fire boat, for which an appropriation has been made, will be contracted for as soon as a study has been made of the subject and the best model and design adopted. That it will prove to be a valuable aid to the Fire Bureau cannot be doubted.

The repair shops at Fire headquarters have been kept busy during 1891. The City has built all the hose carts and fire

ladders and made all repairs to all the apparatus there, beside building six patrol wagons and making all needed repairs to the patrol wagons and to the police vans. These wagons and vans never were kept in better repair, and the new wagons now just completed will compare favorably with the best work done in private shops.

The force at headquarters will have to be increased and more room secured. There is no way to secure additional space except to remove engine No. 17 from the headquarters, securing new quarters for the company elsewhere.

The officers and men in both the Bureau of Fire and the Bureau of Police have been vigilant, zealous, and brave. They have faced every danger. In the Bureau of Police, one officer, Elmer. E. Findley, was killed by a burglar whose arrest he attempted, and another officer, John J. Nesper, going to Findley's assistance, was seriously wounded. In the Bureau of Fire, four men died of injuries received at or in going to fires, and ninety-three were more or less seriously injured.

For the care of the families of officers in these two Bureaus. killed in the discharge of duty, The City of Philadelphia Police Pension Fund Association and the Firemen's Pension Fund of Philadelphia have been formed by the voluntary association of the officers in each Bureau. That Councils may see their way clear to aid these two funds, to the end that they may be placed on a sure financial footing, is my Each man will be a better public servant when sincere wish. he enters on the discharge of a hazardous duty with the thought that his loved ones are to be cared for, if he loses his life in the doing of his duty. The generous public have given much to these two funds, but they are neither of them yet sufficiently large to meet the demands which will be made on them during the next few years. The people of this city whose property is looked after, and whose peace and security is protected by day and by night by officers serving for a moderate salary, should (and would, if their attention could be called to the matter) place these two associations beyond the risk of failure.

The Bureau of Fire Escapes (composed of the Building Inspectors, the Fire Marshal, and the Chief Engineer) show by their report that considerable progress has been made in the matter of the erection of Fire Escapes. Wherever large buildings are erected the fire escapes are special features provided for in the plans and contracts. It appears that there is a desire to comply with the law in every particular.

The number of escapes erected during 1890 was 53.

#### Electrical Bureau.

The able report of the Chief of the Electrical Bureau will well repay careful study. No branch of the service in this Department is more thoroughly equipped, more ably managed, or more productive of good results. The vast majority of our citizens have no idea of the work done by our Electrical Bureau. Steadily and systematically the underground conduits for electric lighting, for telephone and telegraphic communications are being extended on the main streets, and in furtherance of a well matured and comprehensive plan, without bluster or noise, the Bureau is every day demonstrating the entire feasibility of underground conduits. One has but to glance at the electric lighting on Spring Garden street, and on Green street and on other streets, to conclude that electric light conductors will and do work admirably when buried.

The amount of work done by the Bureau in 1891 is shown in detail in the report.

Some of the Chief's recommendations require brief mention.

As to the problem of arc lights for street lighting:—Gas as an illuminant for street lighting is being replaced rapidly by the electric light. Every city, both here and abroad, is extending the electric light service. Some cities own their own plants; most of them secure the lights by contract with private companies. If the limits of this report would permit it, a study of the different systems both here; and abroad would

be extremely interesting. Let me call attention, however, to three systems, illustrating three ways of securing electric lighting. One is the Chicago system, another that in vogue in Paris, and the third the Philadelphia plan.

The Chicago System was entered upon in 1887, when a small appropriation was made to light the river front. A small outfit was purchased, and operations begun in an abandoned The plan was found to work so well that Chicago embarked upon a system embracing the whole city. The plan adopted is as follows: The old city, comprising about fortyfour square miles, is divided into twelve electric light districts. For each district a power station is erected as near the centre as possible, and from each of these stations a main subway is built, extending across the district from boundary to boundary with main feeders run out at right angles. The entire system The whole system when completed will conis underground. tain 7,350 lights. In 1890 the City had already in operation 930 arc lights of 2,000 candle power each. In that year the system had been partly perfected in four districts. was then bending her entire energies to complete the system in time for the World's Fair. With the system but partially completed, it was found that the average annual cost of one 2,000 candle power arc light in 1890 was, according to one report, \$83 per light, but according to the Census Bulletin, No. 100, \$68.00 per light. The estimated average annual cost of lights when the system shall be completed is \$50 per light per annum.

Paris is one of the best lighted cities in the world, using gas lamps in profusion and electric lights in great number. The City is supplied by private lighting companies, who secure the privilege of putting their wires underground on certain conditions; one of these conditions being that the municipality shall be supplied with electric light at a cost agreed upon by a commission fairly chosen; which commission allows the private corporations a fair commercial profit upon the light furnished.

The Philadelphia Plan is to purchase light from companies who are practically granted by the city a monopoly, and who may charge fifty cents or a dollar per night per lamp The privileges which they enjoy of occupyas they choose. ing highways, the opening of which has cost the city millions of dollars since 1854, are granted to them by the city practically without any stipulation for any return; and with a shortsightedness which can scarcely be comprehended, there is no reservation of any power in the city to regulate the cost of the commodity which these companies are alone placed in position of furnishing. That these companies, enjoying the privileges of occupying the streets, should render some return. and should furnish are lights to the city at a fair profit, would seem to be too plain a proposition to require argument to support it.

The several electric light companies in Philadelphia enjoy privileges which are not all alike. Most of them are "overhead" companies though some of them are confined to underground conduits entirely. Some are required to give to the city a certain number of arc lights free; others to wire and light school, police, and fire-houses in their territory. Two are required to pay five per cent. of their net earnings to the city, and several enjoy the privilege of putting down conduits on condition that they give two ducts to the City free of cost. Some give no return whatever to the City for their privileges.

The whole subject should, in my judgment, be governed by a general ordinance, which will bear upon all alike within geographical limits, and which will look to a gradual reduction of the number of the poles now up, and a gradual extension of the underground system. This general ordinance ought to provide for the furnishing of light to the City by these companies, licensed by the City, at a fair price; a price to be fixed by a commission impartially selected, which, while allowing the companies a fair commercial profit, will protect the City from extortion.

This solution of the public lighting problem should be a

temporary one only. The City ought to own and control its own lighting plant. If the finances of the City will not permit this at present, let Councils make as liberal appropriations as possible for the extension of the underground system, and for the erection of the poles and mast arms necessary to support the lamps. This part of the plant will be gradually procured, and eventually it will be necessary only to provide the dynamos and supply the stations and power.

Underground Wires .- No problem perhaps more agitates the public to-day than the removal of the net work of overhead wires which disfigure our streets and are in many ways an element of danger. These wires mar the beauty of our No one has to do more than glance out Green street, or Diamond street, or Spring Garden street, and then down Market street from the City Hall to observe the vast difference between a street free from overhead wires, and one burdened with them. Aside from this consideration, however, they constitute elements of danger. They are dangerous in themselves. The light telephone wire crossing an electric light and power wire will carry a current which means destruction to life and The overhead wires hinder and impede the fireman in extinguishing fires, and this becomes the more important as tall buildings increase. The only argument for the further maintenance of overhead wires is one of economy, and this concerns not the public but the companies owning the wires. Even on the score of economy the argument has to do only with first cost, for the overhead system is much more expensive to maintain than the underground.

The report of the Chief shows that there are 1,871 are lights, including 50 owned by the Girard Trust. There are 12,982 poles in the city, of which 7,452 belong to private corporations and 5,530 belong to the city. There are 3,556 miles of telegraph and telephone wires, and 652 miles of electric light wires in the city. In addition to that the city has 837 miles of overhead wires, making a total of 5,046 miles of overhead wires in the city.

There are 1,474 miles of underground wires of which the city owns 136 miles. There are also 14,394 attachments by private corporations to city poles, for which the city receives 50 cents each per year, or a total of \$7,197.

The progress made in laying underground wires is most satisfactory, and, considering the comparatively small outlay, shows excellent results. During 1891 there were laid by the city:

3,991 feet of six-inch conduits and 4.633 " " four " ".

The various companies by their returns show, that together with that laid by the city there are 645,464 feet of underground conduit (an increase over last year of 25,601 feet) of which the city owns 59,030 feet, (an increase over 1890 of 11,073 feet).

The number of feet of duct laid underground by the following companies are:

American Telegraph and Telephone Company	1,925,812
Bell Telephone Company	1,127,047
Frankford Ave. Merchants' Electric Light Co	
Merchants' Electric Light Company	38,160
Making a total of	3,159,869 feet.

The number of miles of wire in use by telegraph, telephone, and electric light companies, together with the city wires, overhead, is 5,046.48, a decrease of 511.03 miles.

The number of attachments to city poles are 14,394, an increase of 498. The number of miles of wire placed underground during the year 1891 was 1,474.39. The number of poles used by Telegraph, Telephone and Electric Light Companies (exclusive of those along railroads) on the highways of the city is 7,452, an increase of 825. The number of city poles is 5,530, an increase of 221, making a total of 12,982, or an increase of 1,050 over that of 1890. The number of messages transmitted over police wires was 324,202, an increase of 21,582 over 1890. Number of telephone messages 14,613.

The number of calls for patrol wagon 41,124, of which 25,525 were for the conveyance of prisoners, and 4,568 for the conveyance of injured and sick people and the balance were miscellaneous.

Appropriations	\$144,358	45
Disbursements	•	
Merging	<b>\$54</b> 5	

Amount carried over on the books to 1892, \$2,563.11.

#### Bureau of Health.

This important Bureau, dealing with the sanitary condition of the City and the protection of the public health, has been maintained at a high point of efficiency,

The report is detailed and interesting. Some of the main features should have mention in this report.

Milk Inspection. At present there is one Inspector. He has two assistants and three collectors. These officers have performed their duties zealously and with great success, but there are too few of them to accomplish the good results which should flow from the enforcement of the law. I would earnestly recommend an increase by Councils in the number of Inspectors.

During 1891 the Milk Inspectors performed the following work:

Number of inspections	10,052
Number of quarts inspected	174,519
Number of quarts condemned	12,285
Number of quarts adulterated with water	8,832
Prosecutions	27
Convictions	

The Vaccine Physicians report 12,500 cases of successful vaccination, an increase over 1890 of 1,958.

In the House Drainage Bureau, 5,508 plans of new buildings and 4,744 plans of old buildings were submitted and approved, and 33,966 visits of inspection were made.

There were 11,519 complaints of nuisances received. Of these

1,325 were anonymous
762 were referred to other Bureaus
9,432 were referred to the District Inspectors
9,057 were determined to be well founded and orders given to abate the nuisance
6,539 were abated after netification.

Most of those not abated by owners were abated by the Board, and in this work \$13,044.87 were expended. Some work was carried over until this year, owing to the exhaustion of the appropriation.

Sanitary Inspectors. There are numerous diseases contagious but preventable. Our City has during the past few weeks in marked degree, and during the whole year in some measure, suffered therefrom. That these diseases could be stamped out, or at least be prevented from spreading, by proper sanitary precautions there can be no question. The Bureau of Health has one Medical Inspector. One man cannot, of course, handle all of these cases. Councils should either authorize the appointment of a number of Assistant Medical Inspectors, or place at the disposal of the Bureau of Health an emergency fund to be drawn on for the temporary employment of such inspectors, if need for their services should arise.

The fact must be borne in mind that in some sections of our City the population is dense, and is growing more so every day. The people huddled together there are of the poorer classes. They are, in the main, immigrants who have been in our midst but a little time. They are careless of the rules of health and ignorant upon the subject. The best interests of the entire community demand that there be frequent sanitary inspections of the districts in which population is densely massed. The number of cases of infectious diseases reported to the Health Officer were 10,902. These reports were placed in the hands of the Medical Inspector, who selected the cases requiring action. The places requiring disinfection

were placed in the hands of the Disinfector, who made 2,844 inspections.

Meat Inspectors. My attention being called to the fact that diseased cattle were being slaughtered and the meat sold to the people, a Detective and a Patrolman were detailed from the Bureau of Police and a Veterinarian from the Bureau of Health to endeavor to enforce the law, and protect the citizens from the danger of eating diseased meat. With this small force of three men much has been accomplished up to this There have been prosecutions in thirty-one cases and in every instance there has been a binding over to Court. greater good has been accomplished, however, than the arrest of these offenders, for the inspections have been so conducted as to convince the drovers and dealers that their best interests require a rigid enforcement of the law. They have, almost to a man, given to the Inspectors aid and assistance, and to-day as much is being accomplished in Philadelphia in the direction of the prevention of the sale of diseased meat, with the small force and a law inadequate for the purpose, as though we had a large force and modern legislative enactments on the subject.

That there is pressing necessity for a law which will either enlarge the powers of the State Board of Health, or give to the City more ample authority in the premises there can be no doubt. From the very kind proffers of assistance received from different medical men, medical societies and schools it is to be hoped that some well considered and comprehensive act will be drafted and introduced into the Legislature early in the next session, which will have the support of all those interested in preserving the health of the people and meet the approval of the drovers and dealers as well.

The Lazaretto.—For almost a century the City has maintained a quarantine station at its present site, on the river bank, above Darby Creek, in Delaware County. The question of its removal was agitated in the Legislature last winter, and resulted in the passage of a resolution, approved by the Governor on the 21st of May, 1891, authorizing the appoint-

ment of a Board "to communicate with the proper authorities of the Federal Government, or of any State, with a view to obtaining such concessions as will enable the Board of Health of the City of Philadelphia or the Commonwealth of Pennsylvania to secure a suitable site for a quarantine station at some point remote from the centres of population on the Delaware River. The Commission shall also inquire as to the feasibility of establishing joint quarantines for the protection of the ports on the Delaware River and Bay, to be controlled, by the several States bordering thereon."

The Governor named Henry Leffman, M. D., Benjamin Lee, M. D., John Huggard, and Andrew Osborne, and these, with the Governor, comprise the Commission. What progress they have made I do not know, but that they will give the subject that attention and study it deserves cannot be doubted. The question of the maintainance of a strict quarantine at every port of entry concerns not merely the people of that port, but in these days of rapid transit the people of distant towns A case of malignant disease in its incipient stage landed at the port of New York or Philadelphia may develop in Pittsburg or Buffalo or Cincinnati, and lead to a pestilence. The question is one which concerns the whole State as well as Philadelphia, and it is earnestly to be hoped that at no stage in the discussion of the question will local or private interests be permitted to influence the decision.

The appropriations to the Bureau were	113,770	08
The expenditures were	113,125	97
Balance merging	\$644	11

The receipts from permits, fees, repayment of costs for removing nuisances, etc., amounted to \$45,499.03.

## Bureau of Building Inspectors.

The operations of this Bureau show a decrease in permits issued and of receipts as compared with 1890. There were

4,272 permits issued, covering 9,142 separate operations, showing a decrease in permits of 210, and in building operations of 3,136.

The total value of buildings and alterations authorized by permits was \$20,088,236.50. The number of visits made by the Inspectors was 27,182, and the number of condemnation notices issued were 741.

Expenditures	20,549	68
The total revenues of the Bureau	20,529	64
Showing a deficit of	\$20	04

That portion of the report of the Building Inspectors refering to frame buildings is especially worthy of consideration. In this connection I would call your attention to the communication I addressed to you on the subject on January 19th, 1892, which was transmitted by you to Councils on January 28th, 1892.

The subject is one which should receive the thoughtful consideration of Councils. I would urge the recommendation made by Mr. Stokley in his last report, that with reference to frame buildings "fixed regulations should be established covering the whole city, and rigidly adhered to, and all special legislation should be avoided."

# Bureau of City Property.

I strongly urge the views of the Chief of this Bureau as to a new Morgue. The question of a proper structure is being considered, and as soon as sufficient data are procured the matter will be submitted for your consideration.

The matter of the revenue to be derived from the City's wharves is one which demands attention. Wharf properties on both rivers are becoming very valuable, and the City should be in receipt of a handsome revenue from rents from its wharves. A moderate sum judiciously spent in improving the City's ground along the river fronts will, I am satisfied, yield good returns.

The advisability of the City owning the various buildings occupied for municipal purposes has already been referred to. The rents the City pays are, many of them, exorbitant, and could the money be spared to build houses to take the place of those rented the service would be improved and the City save money. By the removal of the Recorder of Deeds office to the City Hall the City saved in one item \$18,500, or capitalizing this at the rate the last City loan was placed at, three per cent., over \$600,000.

The revenue of this Bureau for the year was \$82,571.47.

There were issued vender's licenses and farmer and soldier certificates to the number of 5,280. The number of persons using the public baths during the year were 1,284,647, an increase of 75,716 over that of 1890. The number of bodies cremated at the crematory at the City Burial Grounds were 4,392.

The amount appropriated for the year was	<b>\$44</b> 9,2 <b>9</b> 7	96
The amount expended was	425,561	08
Transferred	20,198	<b>35</b>
Merging	3,538	<b>53</b>

# Bureau of Boiler Inspection.

The number of boilers inspected and approved during 1891 was 2,979, a decrease of 27 as compared with 1890. The number of certificates issued was 2,540, a decrease of 9. The number of new boilers was 500, an increase of 49; and the Bureau has now under its supervision 3,334, an increase of 328. Approvals were withheld in 14 cases.

The number of explosions occurring during 1891 was two, resulting in two deaths. The causes of these explosions are set out at length in the report.

Receipts from all sources	17,884	75	
Expenditures	14,568	44	
Excess over expenditures	\$3,316	31	

In conclusion, I desire to extend to you my heartiest thanks for your uniform kindness and your aid and support in my new and arduous duties. For the Chiefs and Subordinates under me I have only praise. I have found them all faithful in the discharge of their several duties, and ever ready to give any assistance in their power.

I cannot close my report without extending my thanks to Major William H. Hastings for his assistance in translating the many communications in foreign language received by the Department; to the District Attorney, the City Solicitor, and their Assistants, for their ready co-operation and aid in many matters, and to the Director of the Department of Public Works, for his cordial assistance to this Department, rendered whenever the opportunity presented.

I am, with sincere respect,
your obedient servant,
ABRAHAM M. BEITLER.

# ANNUAL REPORT

OF THE

# ELECTRICAL BUREAU,

For the Year 1891.

#### ANNUAL REPORT

OF THE

# ELECTRICAL BUREAU,

For the year ending December 31, 1891.

#### DAVID R. WALKER, Chief.

Philadelphia, February, 10, 1892.

ABRAHAM M. BEITLER Esq.,

Director of the Department of Public Safety.

DEAR SIR:—The report I have the honor to transmit herewith embodies the operations of the Electrical Bureau for the year 1891, being the thirty-sixth in its history, and my eighth as its Chief.

While presenting the accompanying report allow me to call your attention to several subjects which, in my judgment, require the consideration of Councils.

First.—As to the advisability of the City owning its own plants for the lighting of our highways by electric arc lamps. On several previous occasions I have given the matter prominence in my reports, and it occurs to me that delay in adopting such a course but makes the question a more difficult one to handle. As the number of lamps increases, the necessity arises for the erection of more poles and the suspending from them of wires, largely in addition to those already in use; in some cases two lines of poles, and the accompanying wires being erected on many of our streets.

Were the City owner of capacity sufficient for this purpose, many of the annoying features incident to the construction by private corporations, particularly where there are competitors in the same territory, would be avoided. Again. Should the City be the possessor of these plants, steps could be taken toward making the lamps, poles and fixtures a permanency by placing the circuits beneath the surface of the streets as rapidly as circumstances would admit. The overhead service necessary would be of the most approved pattern, the best of insulated wires used as a protection against possible contact with other wires, and the interruptions to the proper lighting of the streets incident to such contact be in a great measure avoided. Apart from all this, the profits now derived by contractors, accruing to the City would revert to the support of the plants after their installation.

I would also direct your attention to, and repeat, the recommendation made in a former report that, until the event of placing the wires underground, the City own and erect its own poles for public lighting. With reference to this a step has been made in that direction by the insertion of an item in the annual appropriation to this Bureau for the coming year for the erection of posts on corners, upon which the lamps are to be placed. The City owning these posts it can, at the expiration of the contract, should the award be made to others than those then occupying it, remove the lamps and wires and replace them by those of the successful contractor. this is a step in advance, it does not cover the recommendations made, which is for the City to own, erect and maintain all the poles necessary for this work, for the use of which the City would derive a revenue; and at the same time place it within the power of the Department to remove all wires and fixtures of those who are unsuccessful in obtaining a renewal of their contract.

Second.—The use of overhead wires for electric light and power purposes is recognizedly a dangerous factor, particularly in large cities like our own, where there are so many and varied electrical interests, necessitating the erection of a vast net work of wires, any one of which, coming in contact, directly or indirectly, with a wire carrying a current of high tension would serve to divert its course. There can be no accounting

for the possible injury to persons, or damage to property, that may accrue therefrom. The only remedy against such possibility is the placing of all wires of whatever nature beneath the surface of the streets. While the City, through its Electrical Bureau, has fully demonstrated the entire practicability of underground wires for all purposes, the authorized erection of many new poles and the stringing of large quantities of wires still go on. The placing of wires underground is a subject that has been broadly commented upon in former reports and is one in which all alike have an interest.

The Electrical Bureau is at present engaged in laying cables, containing conductors, to replace overhead wires on a number of our main streets, the object being to replace this overhead service with underground trunk lines, from which branches will lead to the various points necessary for the requirements of the service under our control. It is the intention, as rapidly as circumstances will allow, to further extend this service, with a view of removing from as many of the principal streets as possible the lines of poles and wires now in use for the purposes for which the cables are being laid. In view of the fact that the City is making advances in this direction, I deem it but proper to recommend that steps be taken, by Ordinance, to have the various companies, occuping the highways with poles and wires, to place them beneath the surface of the street, where they will be free from the annoyance due to interruptions from crossed wires, storms, etc., and remove from the streets the present forest of poles and net-work of wires. In my judgment, and from the present perfected condition of underground cables, there is no reason why they could not be so placed, with perfect satisfaction to all concerned. hardship be entailed the city should be territorially divided, and all should be required to have their wires below the street surface within a stated period.

Pending the passage of an Ordinance to that effect, and, in any event, I desire to draw your attention to the large number of wires crossing our streets, that are illegally constructed,

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poorly placed, and a constant menace to other and decidedly more important electrical services. While ordinances have been passed, involving a penalty for such illegal construction. they have not the same effect that would be given by an Act of Assembly, for the reason that they call for the payment of a fine to be collected as such fines are by law collectible. In the great majority of cases the parties arrested are unable to pay; the Magistrate, having no alternative, releases them and they, recognizing the inability to enforce the ordinance, return to the work and while the police are not watching complete it. This is a growing evil, and one that seriously menaces the safety of all, as there is no surety that such wires will not fall, entangling themselves among electric light and other wires, and convey the currents from those of high tension to all with which they may be in contact, into our offices, homes, or workshops, seriously menacing the welfare of those using the instruments to which they may be connected. The only remedy for the erection of such wires, is, in my judgment, the passage of an Act by our Legislature making it a misdemeanor punishable by A few salutary lessons under fine, or imprisonment, or both. such a law would be the means of stopping the erection of such dangerous constructions.

The pronounced success attending the laying and use of underground cables for all electrical purposes, by this Bureau, and the anxiety evinced by the officers of the Department and Bureau to obtain the necessary appropriation for adding to and extending those already down, most certainly indicates a firm belief in their practicability as an earnest of that belief. The Electrical Bureau has placed under ground during the year six thirty-seconds (6-32) insulated, braided, and painted electric light cables, as follows:

Spring Garden street, between Sixth and Broad streets, has been equipped with four thousand eight hundred and forty-one (4,841) feet, and with sixteen thirty-feet iron poles, and sixteen fifteen-feet mast arms to furnish the facilities for lighting sixteen arc lamps. Current was first passed through this circuit July 27th, 1891.

Also with a view to placing the underground electric light service on Locust street east of Fifteenth street, to Washington Square, before the street was laid with improved pavement, four thousand six hundred and sixty-nine (4,669) feet of this cable were laid and fifteen thirty-feet posts were placed in position. As yet no current has passed through this cable.

Green street, from Broad street to Twenty-fifth, and Twenty-fifth street, from Green street to Spring Garden street, where it connects with the cable laid during 1890, were also served with six thousand one hundred and seventy-three (6,173) feet of this cable, and with twenty-two thirty feet iron posts and twenty-two mast arms complete. Current was first passed through this service September 19, 1891, the street presenting a decidedly brilliant appearance.

One thousand seven hundred and twenty-five (1,725) feet of this cable were laid on Broad street between Spring Garden and Barclay streets, to connect the lamps on Broad street at Mt. Vernon and Wallace streets on underground service; and also to continue the cable on Spring Garden street from Sixth to Broad street, to Columbia avenue, where it was attached to the air line.

The old cable on Broad street, between Fairmount avenue and Brown street, three hundred (300) feet; on Broad street, from Parrish to first lamp above, one hundred and ninety-seven (197) feet; and on Broad street, between Girard avenue and Poplar street, three hundred and ninety-two (392) feet, was replaced with 6-32 insulated cable.

Seven thousand four hundred and three (7,403) feet of thirty-one conductor cable for telegraph and telephone purposes were laid from City Hall, via Filbert, Thirteenth, Chestnut and Broad streets to Washington avenue; and four thousand six hundred and fifty (4,650) feet of nineteen conductor cable on Broad street from Washington avenue to McKean street. The laying of this cable marks the beginning of a permanent system of trunk lines, from which will branch cables of smaller dimensions, filling the requirements of the various electrical systems under the supervision of this Bureau

A piece of nineteen conductor cable, about eighty-five (85) feet in length, was laid from the pole in front of the Twenty-seventh Police District Station-house into the cellar, for carrying the wires from the street into that station.

Five hundred and fifty (550) feet of six conductor braided and painted bunched cable were laid in the conduit on Broad street, between Montgomery avenue and Berks street, and five hundred and eighty (580) feet on Broad street, between Susquehanna avenue and Dauphin street, to replace the cable under the sidewalk in the pitch box that had been damaged by picks during excavations, and the laying of new and improved pavements.

Two hundred and thirty-six (236) feet of six conductor antiinduction, painted, lead-covered cable were laid on Broad street, between Erie and Germantown avenues, replacing that which had been damaged.

Five hundred and eighty-two (582) feet of three conductor, clover leaf cable were laid for telephone purposes on Market street, in the conduit of the Penn Electric Light Company, between Tenth and Ninth streets, and on Ninth street to the Mayor's private office.

One thousand and four (1,004) feet of painted clover leaf cable were laid on Girard avenue, between Broad and Sixteenth streets, and three hundred and thirty-four (334) feet of three conductor bunched, painted and braided cable on Sixteenth street, south from Girard avenue to Cambridge street, to connect the residence of the Director of Public Safety by telephone with the City Hall via the six conductor cable on Broad Street.

The residence of the Director of Public Works was also connected with the office of this Bureau for telephone purposes, by means of thirty-five (35) feet of Brooks' three conductor lead-covered cable, which was connected with the Brooks' three conductor lead-covered cable in the conduit of the American Telegraph and Telephone Company.

Forty-seven thousand one hundred and fifty-eight (47,158)

feet of telegraph and telephone cable have been ordered, are on hand, and will be laid and connected as rapidly as possible. This cable will be distributed as follows: On Broad street, between City Hall and Diamond street; on Ridge avenue, between Broad and Twenty-ninth streets; on Market street, between City Hall and Thirty-second street; on Lancaster avenue, between Market and Fiftieth streets; and on Woodland avenue, between Market and Thirty-seventh streets; being a continuation of our plan for the laying of trunk lines for municipal electrical purposes.

During the year this Bureau has laid fourteen thousand nine hundred and ten (14,910) feet of three conductor cables on the first floor; fifteen thousand three hundred and six (15,306) feet of three conductor cable on the second floor; and twenty thousand one hundred and fifty-one (20,151) feet of three conductor cables on the sixth floor of the City Hall, by the request and at the expense of the Public Building Commission.

#### Conduits (City).

The Electrical Bureau has laid during 1891 three thousand seven hundred and twenty-one (3,721) feet of six duct conduit on Spring Garden street, between Sixth and Broad streets, with twelve man-holes and sixteen thirty feet iron posts and mast-arms.

Also three thousand six hundred and nineteen (3,619) feet of six duct conduit on Locust, between Fifteenth street and West Washington Square, with nine man-holes and fifteen thirty feet iron posts. This latter conduit was laid with a view of preparing the street for the electric lighting and municipal telegraph and telephone service before the patent pavement was laid.

Four thousand six hundred and thirty-three (4,633) feet of four duct conduit was laid on Green street, between Broad and Twenty-fifth streets, and on Twenty-fifth street, between Green and Spring Garden streets, connecting with the service

laid on Spring Garden street during 1890, with thirteen manholes and twenty-two thirty feet iron posts and mast-arms.

Forty-five (45) thirty-feet iron posts and mast-arms have been erected on the west side of Broad street, between Sansom and McKean streets, replacing all the twenty-five-feet posts which had been previously erected, but were too short to allow the suspending of the lamps over the streets on mast-arms.

All the lamps on Broad street south of Sansom street to McKean street have been transferred to the west side of that thoroughfare, and a number of intermediate posts erected for a more thorough system of lighting it.

Thirty feet iron posts and fifteen feet mast-arms have been erected as follows:

West side of Broad street, opposite Green street; Broad and Mt. Vernon streets, Broad and Wallace streets, Broad street and Fairmount avenue, replacing one twenty-five feet in length; Broad and Brown streets, replacing one twentyfive feet in length; Broad above Brown street, Broad above Parrish street, replacing one of twenty-five feet; Broad and Poplar streets, replacing one of twenty-five feet; Broad street and Girard avenue, replacing one of twenty-five feet; Broad and Master streets, replacing one of twenty-five feet; on Diamond street, between Seventeenth and Eighteenth, a new thirty-feet post and fifteen-feet mast-arm and a fifteen-feet mast-arm on the thirty-feet post at Broad and Parrish streets. A change of grade in the street and the laying of a new pavement necessitated the lowering of the city conduit on Broad street, between Moore and Mifflin streets. A new manhole was built on the north side of Girard avenue at Broad street, for the better and more convenient distribution of the underground telegraph and telephone systems. boxes have been introduced into the service at Broad street and Girard avenue, Broad and Diamond streets, and Broad street and Indiana avenue.

Conduits (American Telegraph and Telephone Company).

The underground structures of this company have received no further extension. Their completed system show they have two hundred and sixty-one thousand nine hundred and ninety-four (261,994) feet of conduit, or one million nine hundred and twenty-five thousand eight hundred and twelve (1,925,812) feet of duct. A complete list of the streets in which they are laid was given in my report for 1890.

# Conduits (Bell Telephone Company).

As the limit of time granted them by Councils for the completion of their underground system had expired, the conduits of this company have not been further extended. As shown in my report for 1890, they have eighty-nine thousand four hundred and seventy-six (89,476) feet of conduit, or one million one hundred and twenty-seven thousand and forty-seven (1,127,047) feet of duct laid in accordance with the list of streets given in the report.

The Columbia Electric Light Company, the Underground Electric Light and Fower Company, the Keystone Light and Power Company, the Edison Electric Light Company, and the Penn Electric Light Company have made no further extensions to their systems of underground conduits.

By the dissolution of the Electrical Construction and Maintainence Company the underground structures, laid by them, revert to and become the property of the City.

The Frankford avenue Merchants Electric Light Company. The underground conduit system of this company has been extended by the addition of five thousand eight hundred and ninety (5,890) feet, making a total of seven thousand six hundred and fifty (7,650) feet, or sixty-eight thousand eight hundred and fifty (68,850) feet of duct now in operation by them?

The Merchant's Electric Light Company, of North Front street; the addition of seven hundred feet increases the total

of underground conduit laid by them to six thousand two hundred and seventy-seven (6,277) feet, or thirty-eight thousand one hundred and sixty (38,160) feet of duct.

#### Conduits (Total Returns).

The returns made by the various companies of the underground conduits, together with that laid by the City, show there has been placed underground six hundred and forty-five thousand four hundred and sixty-four (645,464) feet, an increase of twenty-five thousand six hundred and one (25,601) feet, of which the City owns fifty-nine thousand and thirty (59,030) feet, an increase over last year of eleven thousand nine hundred and seventy-three (11,973) feet. As stated in my last report, the Penn Electric Light Company and the Edison Electric Light Company have had placed underground, for the use of the City, thirty-eight thousand nine hundred and eighty-two (38,982) feet of wood and iron conduits, with the necessary manholes giving access to them.

## Police Telegraph.

No branch of Philadelphia's municipal electrical system is more entitled to the earnest care and watchfulness given it than the police telegraph, the artery through which flows the wishes and commands of those entrusted with the guidance and direction of the officers and men of the Bureau of Police. An earnest expression of the opinion of its usefulness may be obtained by a glance at the figures of the returns from the various stations, which show an increase of twenty-one thousand five hundred and eighty-two (21,582) messages over the business done in 1890. While there has been no extension made to this service, much has been done in the way of improvement; old wires have been renewed, the lines equalized as to resistance, instruments have been overhauled and renewed, and where faults have occurred on the circuits they have been speedily remedied and the service restored to its always efficient condition.

The remodeling of the First District Station House necessitated the temporary removal of the instrument to the front part of the building. On the completion of the repairs to the building, the service was transferred to its permanent position in the Roll Room. The newly-rebuilt station house at Tenth and Taylor streets was fitted up for the temporary occupancy of the Twenty-fifth District officers while the old house at Moyamensing avenue and Dickinson street was being remodeled.

The instruments at the old Twenty-seventh District Station House were, late in the year, transferred to the new building next door.

## Police Signal and Telephone System.

In my last report, for 1890, I noted in detail the plans formulated and used by the Bureau for overcoming the induction from electric-light currents, and also for the introduction of an extra key for the insurance of the answer back being received by the officers when using the boxes in this system, and that the Bureau intended to adopt the improvements to all the districts covered by the patrol service. In furtherance of this the boxes have been prepared and the wires placed in parallel metallic circuit in the following districts: the First, Second, Seventeenth, Eighteenth and Twenty fifth; and the old push buttons taken out and the extra battery and short circuit key placed in the following districts: First, Second, Fifth, Eleventh, Seventeenth, Nineteenth, Twenty-third and Twenty-fourth. It is our intention to continue adding the improvements mentioned to the various districts covered by this system until all have been fitted up. One new patrol station was established during the year, the Tenth District, with Central Station at Front and Master streets, being equipped with twelve street stations. The boxes and circuits of this service were prepared against the inductive effect of electric light and other wires, and are giving perfect service. This service was extended in the First District by two boxes; in the Eleventh District, by three boxes; in the Fourteenth District, by two boxes; in the Fifteenth District, by one box; in the Sixteenth District, by three boxes; in the Seventeenth District, hy four boxes; in the Twenty-third District, by two boxes, and in the Twenty-sixth by one box.

Owing to the great length of the Germantown Patrol Service, thirty-one (31) miles, I deemed it advisable for its betterment to divide it into two circuits. The division made necessitated the placing of an extra register, etc., in the Fourteenth District station house. The change proved decidedly beneficial, as the two circuits are working with little or no trouble, whereas, previous to its being divided, the complaints, particularly during wet weather, were continuous. A speaking tube was added to the equipment of this station, between the stable and operating room, for the transaction of the business incidental to patrol work, the telephone, a temporary connection, having been removed.

The patrol service of the Twenty-fifth District has been removed to the newly remodeled station at Tenth and Taylor streets. The instruments in the First District which were temporarily located in the front of the station house, during the alterations to the building, were on the completion of the repairs removed to the roll room.

The Tenth and Eleventh Districts, and the new quarters of the patrol wagon No. 15, were placed in telephonic communication with one another for patrol work.

By request of the officers of the Third National Bank, at Merrick and Market streets, the patrol box located in that institution was removed. Subject to the regular yearly rental of one hundred dollars, a patrol box has been placed in the library of the University of Pennsylvania, at Thirty-fourth and Spruce streets, and connected with the Twenty-first District patrol service.

The following list gives the number of stations in each district together with the private institutions:

#### Patrol Stations.

Pat	rol.	Police Districts.	Banks, etc.	Total Boxes
No.	1	Third and Fourth	2	19
**	2	Twenty-first	2	24
44	3	Sixteenth	1	27
"	4	Fifth	2	14
"	4	Sixth and Twentieth	1	16
**	5	Second		18
44	5	Nineteenth	1	8
41	6	First		8
"	6	Seventeenth		13
44	7	Twenty-fifth		17
٤.	8	Twenty-second		19
"	9	Twenty-third	1	17
"	10	Twenty-fourth		15
**	11	Ninth	1	14
"	12	Fifteenth		10
"	13	Eighteenth		11
"	18	Twenty-sixth		10
"	14	Fourteenth	1	83
		Tenth		12
		Eleventh		11
,		Totals	12	811

## Fire Signal and Telephone System.

While not interfering with the signalling the electric light induction on these circuits at night is so great as to materially interfere with the transmission of telephonic messages. On the greater number of circuits working under this system it is our intention, with a view of overcoming this induction, as rapidly as circumstances will admit, to change them from ground terminals as at present constituted to parallel metallic circuits.

A change of residence of the Chief of the Bureau of Fire, the removal of the engine company from the House of Correction to their new quarters at Holmesburg, and of the engine company at Chestnut Hill to their new house, constitute all the changes made in this branch of the service.

#### Fire Alarm System.

The system of electrical testing now in use by the Bureau indicated that a number of the wires connected with this system were of such a high conductivity resistance as to be unwarranted by their length. A thorough inspection and test evinced the fact that many joints in the wires were faulty and required soldering, and that in some places the wires required renewing. After a thorough and systematic course of repairs the resistance of the circuits were brought to a point consistent with their length, adding greatly to their efficiency.

The addition of an eight inch gong in the residence of Assistant Engineer Garrity, and an eight inch gong placed at private expense in the station of the Philadelphia Traction Company at Twenty-third street and Columbia avenue; the removal of the small gong of the Chief Engineer of the Bureau of Fire; the removal of the fifteen-inch gong from the old engine house at the House of Correction to the new one at Holmesburg, and the removal of the fifteen-inch gong from the old to the new house of the Chemical Company at Chestnut Hill constitute the additions to and the changes made in this service. No interruptions to the accuracy of the transmission of the alarms over these circuits have occurred. The few individual complaints, generally of a local and mechanical nature, were quickly and readily adjusted.

# Fire Signal System.

As in the fire alarm system a systematic course of repairs to the wires connected with this service placed them in complete order; requiring, as they do, to be in perfect working condition at all times, it is our intention to still further insurethem against possible interruption by protecting them by means of a shielded and insulated wire from coming in contact with trees, which are a source of considerable escape of current, particularly during wet weather.

The rapid development of building operations in all sections of the City create a never ceasing demand for the extension of this service. A number of boxes added yearly serve to keep pace with this demand, and in case of necessity placeall within easy reach of the Burcau of Fire.

Fire-signal boxes have been placed in the establishment and at the expense of George V. Cresson, Eighteenth street and Allegheny avenue, and of the Girard avenue Theatre-Company, Marshall street, and Girard avenue, connections being made with the City circuits.

#### Telephones in the City Service.

Of all the many and varied systems under the control and supervision of this Bureau, there are none that require so much attention at our hands as the telephone service of the City.

The switch-board purchased and placed in position during 1890 has been the means of increasing the rapidity of business communication between the various municipal offices connected with it. The value of the service rendered by the operation of this board may be seen by referring to the table showing the number of messages received and sent and calls made on it during the year.

The residence and private office of the Mayor and the residences of the Directors of Public Safety and Public Works, the offices of the District Attorney, the Clerk of the Quarter Sessions, the City Ice Boats, the Bureau of Lighting, the Dynamo rooms of the Public buildings, the Children's Homeopathic Hospital, the offices of the City Solicitor, the Receiver of Taxes, the Park Commission, the Captains of Police, the Hahnemann Hospital, the St. Joseph's Hospital,

the residence of Secretary Beitler, the residence of Superintendent of Police Linden, the office of the Register of Wills, the Health officer, the Board of Revision of Taxes, the Bureau of City Property, the office of the City Controller, and the Bureau of Boiler Inspection were connected to the switch board during the year.

The private office of the District Attorney was connected by telephone with his office at the City Hall.

The Police Station at Manayunk, and the Sub-Police Station at Roxborough were connected by telephone with St. Timethy's Hospital, at Roxborough. The Tenth and Eleventh Police Districts and the Patrol stables, Frankford road above Master street, were connected by telephone for convenience in calling the wagon. The telephone located on the Police Tug King, lying on the Schuylkill, was placed in the small office prepared for it on the west bank. The full set of telephones formerly in use at the engine-house at the House of Correction was transferred to the new house at Holmesburg on their removal.

To further benefit the service, and to insure an answer to calls when made, extension bells have been placed in various circuits.

The residence of the Director of Public Works, in the office of the Chief of the Bureau of City Property, in the residence of the Chief of this Bureau, in the office of the House of Correction, and in the van stables at Twelfth and Reed streets.

The residences of the ex-Chief of the Bureau of City Property, and the ex-Superintendent of Police, were disconnected, and the telephones returned to this office.

## Electric Lighting.

At the close of the year 1890, there were twelve hundred and ninety-three (1293) electric lights on the highways of the City. At the close of the year 1891, there were seventeen hundred and thirty-one (1731) lamps. Fifty lamps on Delaware avenue and Front street are maintained at the expense

of the Girard Trust, making a grand total of seventeen hundred and eighty-one (1781) lamps.

The method of testing the candle power by means of the volt and ammeter was continued at frequent intervals during the year; lamps or circuits found not meeting the contract requirements of nine and six-tenths  $(9\frac{6}{10})$  amperes and forty-seven (47) volts, were at once brought to the attention of the company in whose district they were and promptly remedied. A mean average of all tests made during the year show nine and four-tenths  $(9\frac{4}{10})$  amperes for current, and forty-seven and seven-tenths  $(47\frac{4}{10})$  volts per lamp.

The Bureau has been called on during the year to make inspections of the theatres having electric light installations. In all cases where fault in wires or apparatus were found, a notification to that effect received prompt attention. request of Superintendent Lawrence of Blockley Almshouse. an inspection was made by us of the incandescent plant placed in that institution. The contract for the same was crudely drawn, and was evidently framed by some one little experienced in such matters. The contractor lived up to the terms of the contract in almost every particular and the work was done in accordance with the specifications, but the faulty terms of the contract were shown in the poor class of the work Many of the existing conditions were so glaringly at variance with the needs of perfect electrical construction, that the party who performed the contract were notified to place them in different condition, or the work would not be accepted.

While they had fully lived up to the terms of their contract, they should not have been required to make the change demanded, but recognizing that the character of the work done was not of a class that would have existed had the contract and specifications been drawn more specifically, they made the alterations and change suggested, and the work was passed as having been done in accordance with the contract and specifications.

#### License Returns.

The appeal made by the City Solicitor to the United States Supreme Court against the decision rendered by Judge Butler, of the United States Circuit Court, declaring "The license charges imposed by the City upon the various telegraph, telephone and electric light companies were excessive," to the best of my knowledge still remains in that Court.

The City Solicitor, in pursuance of the decisons rendered by the Supreme Court of Pennsylvania, "That the charges made were not excessive," has entered suit for the license charges due from the various companies chartered and doing business in Pennsylvania. An exhibit showing the amount due from each company will be found among the tables.

#### Money Paid to the Receiver of Taxes.

The total amount paid to the Receiver of Taxes from all sources, to the credit of this Bureau, was nineteen thousand seven hundred and thirty-four dollars and fifty cents, as follows:—

License charges for 1891,	\$18,161 50
Sale of old material during 1891,	673 00
Use of Police signal and Telephone system, 1891	900 00
Total receipts	\$19,734 50

## Appropriations.

Of the one hundred and forty-four thousand three hundred and fifty-eight (144,358) dollars and forty-five (45) cents appropriated to this Bureau for 1891, one hundred and forty-one thousand two hundred and forty-nine (144,249) dollars and fifty-eight (58) cents were expended. Five hundred and forty-five (545) dollars and seventy-six (76) cents merged, and two thousand five hundred and sixty-three (2,563) dollars and eleven (11) cents were carried to the books for 1892.

#### Number of Poles, Miles of Wire, Etc.

According to the returns made by the telegraph, telephone, and electric light companies there were on the 31st day of December, 1891, on the highways of the City (exclusive of those along railroad tracks) Seven thousand four hundred and fifty-two (7,452) poles, an increase of eight hundred and twenty-nine (829). Five thousand five hundred and thirty (5,530) City poles, an increase of two hundred and twenty-one (221), and a total of City and all other poles of twelve thousand nine hundred and eighty-two (12,982), a total increase of one thousand and fifty (1,050).

Three thousand five hundred and fifty-six and forty-nine one hundredths  $(3,556\frac{49}{100})$  miles of telegraph and telephone wire, being a decrease of seven hundred and fifty-seven and seventy-four one hundredths  $(757\frac{44}{100})$  miles; six hundred and fifty-two and twenty-four one hundredths  $(652\frac{24}{100})$  miles of electric light wire, an increase of seventy-nine and seventy-five one hundredths  $(79\frac{130}{100})$  miles, making a total of City and all other wires on poles, fixtures and buildings of five thousand and forty-six and forty-eight one hundredths  $(5,046\frac{430}{100})$  miles, a decrease of five hundred and eleven and three one hundredths  $(511\frac{1}{100})$  miles. This decrease was caused by the removal of overhead wires, formerly erected by the Bell Telephone Company of Philadelphia.

There are fourteen thousand three hundred and ninety-four (14,394) attatchments to City poles, being an increase of four hundred and ninety-eight (498), to support three hundred and ninety-two and forty-seven one hundredths (392,400) miles of wire.

## Underground Wires.

At the close of the year there had been placed underground in the City, one thousand four hundred and seventy-four and thirty-nine one hundredths (1,474 1%) miles of telegraph and telephone and electric light wires, of which the City owned one hundred and thirty-five and ninety-seven one hundredths (135 1%) miles.

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## Permits, (Overhead.)

The following will show the number of permits issued to each company and the purpose for which they were granted.

## Renewal of Poles.

itemental by 1 bees.	
Banker's and Merchant's Telegraph Company	1
	1
	2
	3
	5.
	1
	3
	2
	6
	1
Total2	25
Erection of New Poles and Posts.	_
Bell Telephone Co	1
	9
	3
	4
	3
	5
	<b>2</b>
Northern Electric Light Company 1	2
· · · · · · · · · · · · · · · · · · ·	5
	2
	2
	5
	21
- · · · · · · · · · · · · · · · · · · ·	9
United States Electric Light Co	0
_ = <del>_</del>	6
	4
Western Union Telegraph Co	1
Total	- 24
Running of New Wire.	
Anerican District Telegradh Co	4
American Eelegraph and Telephone Co	3
Bell Telephone Co	2
<del></del>	

Bankers' and Merchants' Telegraph Co	13
Brush Electric Light Co	53
Bureau of Water	4
Bureau of Gas	2
Cheltenham Light, Heat and Power Co	2
Diamond Electric Co	15
Edison Electric Light Co	1
Electric Power Co	4
Germantown Electric Light Co	2
Manufacturer's Electric Co	3
Northern Electric Light Co	12
Pennsylvania Railroad Co	2
Philadelphia Electric Light Co	7
Powelton Electric Light Co	45
Philadelphia, Reading and Pottsville Telegraph Co	5
Southern Electric Light Co	25
Suburban Electric Co	6
West End Electric Light Co	7
Western Union Telegraph Co	10
Wissahickon Electric Light Company	2
United States Electric Light Co	41
<u>-</u>	
Total	270
-	
Repairs to and Renewals of Wire.	
American District Telegraph Co	7
Atlantic Refining Co	2
Bell Telephone Co	52
Brush Electric Light Co	3
Bankers' and Merchants' Telegraph Co	2
Baltimore and Ohio Telegraph Co	ī
Electric Power Co.	i
Mutual Union Telegraph Co	2
Northern Electric Light and Power Co	2
Pennsylvania Railroad Co	11
Philadelphia, Reading and Pottsville Telegraph Co	
	- 9
	2
Philadelphia Electric Light Co	2
Philadelphia Electric Light Co	2
Philadelphia Electric Light Co	2 2 2
Philadelphia Electric Light Co	2

# Removal of Poles.

Bell Telephone Co	2 1 1
Northern Electric Light Co	2
Western Union Telegraph Co	2
Total	8
Removal of Wires.	
American Telegraph and Telephone Co	1
Bell Telephone Co	3
Western Union Telegraph Co	3
Total	7.
A total of five hundred and thirty-four (534) permits is for overhead works, an increase of two hundred and nin eight (298) over last year, due to the inauguration of companies which had been granted privileges by Councilerect poles and wires along the highways.	new
$Permits,\;(\mathit{Underground.})$	
The following will show the number of permits issue	ed to
each company and the purposes for which they were gran	
${\it Repairs}.$	
Columbia Avenue Electric Light Co	1

Columbia Avenue Electric Light Co	1
Edison Electric Light Co	5
Merchants' Electric Light Co., of North Front Street	8
The Penn Electric Light Co	149
Total	163
New Work (House Connections).	
American Telegraph and Telephone Co	3
Bell Telephone Co	1
Columbia Avenue Electric Light Co	18
Edison Electric Light Co	8
Frankford Avenue Merchants Electric Light Co	9

Manufacturers Electric Light Co	24					
Merchants Electric Light Co. of North Front street	29					
Penn Electric Light Co	43					
West End Electric Co	48					
Total	183					
New Work (Main Leads).	2					
Bell Telephone Co						
Total	3					

Making a total of three hundred and forty-nine (349), a decrease of one hundred and eight (108) from last year and a total of eight hundred and eighty-two (882) of all permits issued.

#### Number of Telegraph Messages.

Three hundred and twenty-four thousand two hundred and two (324,202) messages were transmitted over the police wires, being an increase of twenty-one thousand five hundred and eighty-two (21,582) over last year.

A synopsis of the work done by districts may be seen in the tabulated statement. Thirty (30) messages were transmitted over the wire connecting this office with the Bureau of Gas.

### Operations of the Telephone Switch-Board.

The total of fourteen thousand six hundred and thirteen (14,613) telephone messages show an increase of two thousand three hundred and forty-seven (2,347) over last year. Two hundred thousand eight hundred and twenty-two (200,822) connections were made by the operators working the switchboard, an increase of eighty-five thousand seven hundred and twenty (85,720) over last year.

### Number of Alarms of Fire

There were five hundred and ninety-one (591) alarms of fire transmitted over the wires; first alarms, five hundred and sixty (560); second alarms, twenty-four (24); third alarms, six (6); fourth alarms, one (1), an increase of twenty-seven (27) over 1890.

#### Number of Calls (Police Signal System).

Two million seven hundred and eighty-four thousand eight hundred and sixty (2,784,860) calls, an increase of one million fourteen thousand six hundred and eighty-two (1,014,682) over 1890, were made on the police signal and telephone service during the year; two millions seven hundred and forty-three thousand seven hundred and thirty-six (2,743,736) of which were the telephone service, forty-one thousand one hundred and twenty-tour (41,124) wagon calls, twenty thousand and ten (20,010) reports from private institutions using the service.

A summary of the forty-one thousand one hundred and twenty-four (41,124) calls made for the wagons shows: twenty-five thousand five hundred and twenty-five (25,525) for the conveyance of prisoners, four thousand five hundred and sixty-eight (4,568) for the conveyance of injured persons, seven hundred and ninety-two (792) for the conveyance of officers to fires, and ten thousand two hundred and thirty-nine (10,239) miscellaneous.

The following boxes show the greatest number of calls for the wagons during the year 1891:

Box No.	Location.	Patrol No.	No. calls.
44.	Sixth and St. Mary streets	1	1,174
62.	Seventh and Bainbridge streets	5	662
51.	Charles and Bainbridge streets	5	643
<b>4</b> 5.	Sixth and Spruce streets	1 .	495
42.	Fifth and Lombard streets	1	386

The following boxes show the greatest number of telephone calls during the year 1891:

Box No.	Location.	Patrol No.	No. calls.
12.	Nineteenth and Fairmount avenue	. 11	27,148
14.	Twenty-first and Hamilton streets	. 11	26,826
16.	Ridge avenue and Ogden street	. 11	24,265
134.	Tenth and Rodman streets	. 5	23,199
6.	Corinthian and Fairmount avenue	. 11	22,940

Number of Instruments, etc., in use by the City.

The City had in use at the end of the year, forty (40) police dial instruments and relays; sixty-four (64) alarm instruments located in engine houses, depots and factories, eleven (11) of which are private.

Six hundred and twenty-six (626) five signal boxes, thirty-five (35) of which are private; sixty-three (63) sets of bells, relays and keys, devoted to the fire signal and telephone service; twenty-two (22) police signal and telephone system central office sets complete; two hundred and ninety-nine (299) police patrol sentry booths, three hundred and eleven (311) police patrol signal boxes, five thousand five hundred and thirty (5,530) poles, eight hundred and thirty-seven and seventy-five one hundredths  $(837\frac{75}{100})$  miles of overhead wire, one hundred and thirty-five and ninety-eight one hundredths  $(135\frac{98}{100})$  miles of underground wire, fifty-nine thousand and thirty (59,030) feet of underground conduit, five hundred and twenty-four (524) telephones.

#### Miscellancous.

The messenger call service of the American District and Western Union Telegraph Companies have been placed on conductors, furnished by this bureau, to the underground cable terminal in all of the offices in the City Hall. Buzzers, bells and push buttons have been placed in many of the offices in the City Hall, and in a number of the police station houses.

A mile of double conductor wire, known as the patent metallic shield and anti-induction wire, was presented to the bureau by the National Electric Company, No. 19 Congress street, Boston, Mass., and placed in circuit between the Second and Nineteenth District Police Stations, and the stable of No. 5 patrol, No. 820 Lombard street. A test of the wire for insulation resistance showed it to largely exceed seven hundred and fifty thousand (750,000) ohms, the greatest resistance that could be obtained by the means of instruments used,

a Bunnel galvanometer, Rheostat and bridge. A test for conductivity resistance gave seventy-two and six tenths  $(72\frac{6}{10})$  ohms, of which the core wire contained eight and seventy-one one hundredths  $(8\frac{71}{100})$  ohms, and the sheath sixty-three and eighty-nine one hundredths  $(63\frac{89}{100})$  ohms. The wire has been giving the best of service, and having supplanted one that was almost useless from the induction from electric light circuits, the results are most gratifying, as there is no interference whatever from induction effects. From the good results obtained it is probable we shall use it still further.

On July 1st a system was introduced by the officers of the bureau by means of which faults occurring on the wires connected with the various services entering the operating room in the City Hall are accurately located by a series of tests made with instruments of electrical precision.

Before the introduction of this system a fault occurring on a wire, particularly the longer circuits, necessitated the services of a lineman, in many cases the greater part of a day, as there was no alternative but to walk over the circuit, and for tests calling in from the different boxes on the way until the trouble was found and remedied. Under the present method the linemen are frequently sent directly to the point of contact; in no instance are the measurements more than two or three blocks out of the way. The results are particularly gratifying, a fault occurring is quickly removed, and the very important services embraced in the City's electrical system are brought nearer absolute perfection than ever before.

A guy wire wrapped around a signal box pipe, and crossed with an electric light wire, and a broken telephone wire falling across one of our signal circuits, was the cause of a number of magnets in fire-signal boxes being burned. It is our purpose to obviate this trouble by the introduction of a device to shunt the boxes out when currents of high intensity introduced into our circuits by crossed wires are passing through them.

In conclusion, allow me to express myself duly grateful for the unlimited confidence expressed, and for the valued counsel and assistance rendered by the Mayor, the Director of Public Works and yourself, in the administration of the affairs of this Bureau, and to thank the Chiefs of the various Bureaus for their co-operation and concurrence in the matters coming under their care in which this Bureau had an interest. And to express my appreciation of the very able and efficient manner in which Manager John C. Sager has assisted me in the management of this branch of the city's service, and to the other employees of the Bureau for the faithful performance of their duties.

Very respectfully,
D. R. WALKER,

Chief of Bureau.

Summary of the operations of the Police Telegraph during the year 1891.

			·	
	) 1	Push carts.		92
	gi.	Drays.	2	61
	ള	Carts.	244 12 1-0445-1 1 1 2000 1-31-1 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	18
	Vehicles.	.anogaW	0002427-11-1188880-11-17-11-188880-4440-0-12-1	281
	P	Carriages.		8_
SZ.	ig.	Cattle.	EGG 1 21 1 1 1 1 2 1 2 2 2 2 2 2 2 2 2 2	197
SIO	Estrays.	Mules.	9 0 0 8 3   0 1 1 0 1   1   1 4 1 8 C 5 1 1 4 2   1 6 1   1 4 1   2	20
IVI	当	Horses.	82448211618288 93 9 9 7 4 4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	637
SUB-DIVISIONS.	et ren.	Girls.	885888888888888888888888888888888888888	1,322
<b>3</b> 2	Lost children.	Boys.	2822 2010 2010 2010 2020 2020 2020 2020	2,214
	Missing persons.	. Мотом	84 www.www.uurruo.co.co.de.co.	241
	Mis	Меп.	864 - 1 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2	428
		Miscellaneo	4111 660 670 670 670 670 670 670 670	213,499
		Classified.	6.00	110,703
, E	T -	Vehicles,	844891795289189881829555998811 15 - 8	200
d to		Estrays.	4944941-34468481-9440888811489-84188 1955-18	8
Restored to friends & owners	·u	Lost childre	25 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	3,536
Fig.	Missing persons.		282 282 282 282 282 282 282 282 282 282	699
	Lost children.		113 145 145 145 145 145 145 145 145	5,874
tion of	Missing persons.	673 673 673 673 673 673 673 673 673 673	80,462	
Description		Criminals.	7887 821 821 821 1,578 1,545 1,545 1,545 1,598 1,698 1	27,986
"	.tty.	Stolen prope	75.4 1.75	17,694
	. <b>29</b> 11	Relating to	512 572 573 574 672 672 672 672 672 673 673 673 673 673 673 673 673 673 673	2,984 19,189
ot b	mone Jury.	nua srsoffiO basto	22848888888888888888888888888888888888	2,984
	.bedi	Согопет по	8244255882344888844468588855231 :- 1070 a	32
	<b>.</b> 3t	Messages ser	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	145,606
	,bevied,	Messages re	4,192 4,192 10,186	178,596
.89%8	asəm 1	W hole No. o	7,758 10,885 10,885 10,885 16,985 16,985 16,466 16,466 16,485 16,486 16,	324,202
		Districts.	First Second Third Fourth Fifth Saxth Seventh Eighth Minth Fourteenth Fifteenth Fitteenth Fittee	Total

74

Police Signal and Telephone Service for the year 1891.

					-			•									
	TOTAL.	214,317	200,002	235,306	227,524	235,058	223,046	224,551	222,711	226,402	236,301	224,251	254,267	2,743,736			
	27th District.	469	424	404	418	366	397	462	437	420	450	502	370	5,109			
	No. 15 Patrol, 10th District.						i		:			12,108	13,824	25,932		•	
	No. 15 Patrol, 11th District.	7,087	6,586	7,485	6,941	7,240	6,325	6,478	6,297	6,875	9,194	10,759	10,953	92,220			
	No. 14 Patrol, 14th District.	9,540	9,149	10,643	10,693	10,694	9,581	9,879	9,845	10,546	10,589	10,118	10,885	122,165			. •
	No. 13 Patrol, 26th District.	10,290	9,317	10,325	026'6	10,313	9,995	10,374	10,357	10,062	9,939	9,272	9,537	112,711			
	No. 13 Patrol, 1dth District.	13,858	12,882	13,865	13,227	13,925	13,413	13,773	18,880	13,365	13,748	13,375	13,813	163,127	-		
	No. 12 Patrol. 15th District.	7,812	7,097	7,807	7,590	7,792	7,590	7,822	7,832	7,675	7,807	7,560	8,618	92,902			
	No. 11 Patrol, 9th District.	20,112	18,219	20,026	19,614	20,040	19,751	19,920	19,301	19,524	19,871	19,881	20,004	236,263		٠	
	No. 10 Patrol, 24th District.	9,975	9,015	10,247	9,972	10,257	9,560	8,855	8,803	8,297	8,443	8,390	8,470	110,284			
ģ	No. 9 Patrol, 23d District.	14,379	13,197	14,763	14,685	14,912	14,211	13,189	12,892	13,685	14,737	18,760	14,514	168,924			
TELEPHONE CALLS.	No. 8 Patrol, 22d District.	13,712	12,388	13,734	13,270	13,716	13,290	13,732	13,731	18,276	18,753	13,333	13,529	161,464			
LEPHO	No. 7 Patrol, 25th District.	3,373	5,275	9,154	8,837	9,076	8,775	10,421	10,711	10,445	11,040	10,498	11,048	108,653			
T	No. 6 Patrol, 17th District.	6,440	5,106	10,124	9,932	10,806	10,442	10,337	11,255	11,786	11,854	11,201	11,594	120,877			
	No. 6 Patrol, 1st District.	8,077	7,311	8,593	8,335	8,590	8,334	8,578	8,582	8,421	9,340	10,837	10,972	105,970			
	No. 5 Patrol, 19th District.	10,938	9,837	11,083	10,570	11,036	10,445	10,843	10,274	10,533	10,899	10,770	10,832	128,060			
	No. 5 Patrol, 2d District.	5,761	8,383	13,653	13,144	13,782	12,912	13,388	13,314	12,938	13,391	13,043	13,450	147,059			
	No. 4 Patrol, 5th District.	13,259	11,773	12,940	12,564	12,455	11,633	11,819	11,841	11,869	12,469	11,530	12,638	146,790			
	No. 4 Patrol, 6th & 20th Districts.	10,543	9,438	10,873	10,134	10,408	9,872	606'6	9,757	10,229	10,609	10,147	10.607	122,526			
	No. 3 Patrol, 16th District.	18,934	16,411	18,190	17,045	18,104	16,736	15,653	15,047	15,512	16,615	17,328	18,162	203,737			
	No. 2 Patrol, 21st District.	17,659	17,532	18,258	17,982	18,607	16,481	15,744	15,381	17,504	116,71	17,080	17,665	207,804			
	No. I Patrol, 3d & 4th Districts.	12,109	10,662	13,236	12,641	12,939	13,300	13,375	13,174	13,540	18,652	12,759	12,782	154,169			
	Моктия.	January	February	March	April	Мау	June	July	August	September	October	November	December	Total	1 1 1 1 1 1	ogl	le

Summary of the Police Signal and Telephone Service for the year 1891.

	Total of all Calls.	216,995	202,729	238,267	230,935	238,629	226,620	228,167	226,913	230,682	239,709	247,287	258,007	2,784,860
	Total Bank Calls.	1,648	1,552	1,715	1,667	1,734	1,627	1,690	1,720	1,665	1,664	1,640	1,688	20,010
	Germantown Trust. Patrol No. 14.	309	333	369	360	370	328	349	368	990	359	34.	372	4,221
	North Western, Patrol No. 9.	176	165	177	179	183	178	185	182	180	183	176	180	2,144
CALLS.	South Western. Patrol No. 5.	476	436	483	460	498	460	484	18	472	447	460	458	5,618
BANK CA	Third National. Patrol No. 4.	155	139	153	148	152	147	146	158	143	148	149	191	1,783
Mg.	Market Street. 'Patrol No. 4,	62	26	8	9	61	8	61	19	22	5	26	99	717
	Centennial. Patrol No. 2.	186	168	186	180	186	180	186	186	180	186	180	186	2,190
	Guarantee Trust. Patrol No. 1.	160	143	191	160	160	154	156	162	153	156	151	167	1,873
	Republic, Patrol No. 1,	124	112	124	120	124	120	124	124	120	124	124	124	1,464
	Total.	2,678	2,727	2,961	3,381	3,571	3,574	3,616	4,202	4,289	3,408	2,986	3,740	41,124
	No. 14 Patrol.	9	#	2	4	8	82	124	75	108	98	8	8	930
	No. 13 Patrol.	265	264	284	319	308	828	314	343	349	284	298	296	3,653
1	No. 12 Patrol.	26	4	28	89	88	23	8	68	89	29	67	72	170
	No. 11 Patrol.	137	125	143	143	189	201	186	176	222	188	131	171	2,012
	No. 10 Patrol.	98	92	102	117	133	107	139	140	140	118	92	124	1,377
øj.	No. 9 Patrol.	61	28	11	115	121	11	130	108	101	28	61	78	1,039
CALLS	No. 8 Patrol.	79	22	28	100	96	119	128	114	123	130	62	101	1,182
WAGON	No. 7 Patrol.	8	97	129	168	178	158	125	127	182	153	125	161	1,693
	No. 6 Patrol.	146	134	168	191	246	217	173	197	194	198	190	569	2,323
	No. 5 Patrol.	309	351	34)	364	497	380	421	443	388	377	332	419	4,620
	No. 4 Patrol.	345	311	387	433	439	358	360	415	449	431	348	454	4,725
	No. 3 Patrol.	122	174	131	173	808	247	526	202	192	170	138	139	2,098
	No. 2 Patrol.	127	88	26	150	158	150	145	143	140	158	107	142	
	No. 1 Patrol.	815	916	934	976	840	1,096	1,082	1,628	1,624	066	972	1,224	13,097
	Months.	January	February	March	April	Маў	June	July	August	September	October	November	December	Total 13,097 1,606

Synopsis of Wagon Calls, 1891.

Months.	Conveyance of Prisoners.	Conveyance of Injured Persons.	Conveyance of officers to and from fires.	Miscellaneous.	Total Wagon Calls.
January	1,614	353	47	664	2,678
February	1,697	294	48	688	2,727
March	1,810	322	56	773	2,961
April	2,127	361	69	824	3,381
May	2,179	430	84	878	3,571
June	2,129	471	80	894	3,574
July	2,242	421	76	877	3,616
August	2,576	457	76	1,093	4,202
September	2,696	404	49	1,131	4,280
October	2,194	342	47	825	3,408
November	1,893	316	_ 70	707	2,986
December	2,368	397	90	885	3,740
Total	25,525	4,568	792	10,239	41,124

· Showing the number of calls from each box in the Police Signal and Telephone System, during the year 1891. [Patrol No. 1. Third and Fourth Police Districts.

		Total.	13,340 12,308 7,003 11,102 10,300 12,152 8,028 1,873 1,464 9,876	98,415	6,608 6,359 6,359 6,480 6,480 8,804 8,804 8,804	62,939		166,354
	Dece'ber.	Telephone.	830 933 994 578 903 854 919 671 1124	7,878	620 506 293 254 801 460 794 794	5,713	13,591	14,006
	Dece	Wagon.	48408786	321	48 46 50 10 10 116 116 116 116 116 116 116 116	22	415	4
	Nove'ber.	Telephone.	988 988 952 952 940 956 956 956 956	7,465	628 626 626 555 836 838 838 838 838 838 838 838 838 838	5,860	13,325	13,671
	Nov	.nogsW	888888888888888888888888888888888888888	272	80000448514	74	346	=
	October.	Telephone.	1,049 1,049 1,012 584 992 876 1,006 1,006 124 798	8,158	648 672 287 287 287 561 829 388 579 941 784	6,097	387 14,255	14,642
١	Oct	Wagon.	<b>4</b> 254 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	312	2000001187	12	387	4
	Septe'ber.	Telephone.	886 1,052 1,052 588 958 859 1153 869 869	8,141	667 687 298 574 846 398 599 867 867 867 867	6,187	481 14,328	14,809
	Sept	Wagon.	821624244 :: 88	383	21812	8	481	14
	August.	Telephone.	1,096 1,046 1,046 1,046 1,006 899 899 1162 1162 1162 1162	8,500	4447 640 285 399 727 727 834 694 834	5,410	13,910	14,402
İ	Αn	Wagon.	121 131 131 138 138 138 138 138 138 138 13	375	24 17 10 10 10 10 10 10 10 10 10 10 10 10 10	11	492	12
	July.	Telephone.	1,080 1,080 1,012 586 994 911 1,014 683 124 865	8,318	649 692 804 667 807 885 887 887 888	5,694	445 14,012	,457
1	'n	макоп.	82114188 728 724 142 729 144 145 145 145 145 145 145 145 145 145	333	71166512995127	65		4,
	June.	Telephone.	1,060 1,060 1,066 582 983 1,116 682 154	8,479	516 590 201 201 820 820 837 837 652 837	5,521	14,000	14,396
1	ų	.подя W	284028220	311	-4050 84446	85	396	12
	May.	Telephone.	1,019 992 992 932 932 1,008 1,008 124	8,020	709 584 210 466 804 887 539 627 681 370	5,377	13,397	18,779
1	2	.позвW	82403221 8	280	129529129646	02	882	129
	April.	Telephone.	889 982 971 9522 936 938 938 938 120 120	7,868	510 688 290 290 721 797 874 518 677 622	5,396	353 13,264	13,617
1	¥	.nogsW	25 1 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	274	8 9 8 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	73		=
	March.	Telephone.	899 1,016 576 962 973 1,008 673 673 747	8,038	363 707 274 274 533 988 397 561 826 721	5,675	13,713	14,070
1	Ä	Wagon.	86 4 4 8 6 6 8 8 8 8 8 8 8 8 8 8 8 8 8 8	277	28.7.13.2 6 6 10 10 16 16	8	367	=
	Febrary.	Telephone.	834 912 902 526 614 610 882 526 526 530	6,651	376 633 216 382 791 301 455 598 598	4,626	301 11,277	11,578
	Feb	Wagon.	882122121 888	244		57		=
	January.	Telephone.	895 1,001 992 992 665 676 665 968 968 124 124	7,276	418 622 243 243 439 984 333 513 724 724	5,360	12,636	12,927
ĺ	Јап	.nogaW	29 312 41 11 11 26	221	200240015	2	291	-
		Location.	sth and Lombard	Total of 3rd District	4th and Arch	Total of 4th District	Total	Grand total
1.	,x00	Number of h	125 125 125 125 125 125 125 125 125 125		115 115 126 126 126 333 1333 142		<u> </u>	
1		ļ	Third District.	1. 1	Fourth District.			

Geo. W. Cromwell, Geo. W. Jones, Ww. B. Haring,

Showing the number of Calls from each box in the Police Signal and Telephone System during the Year 1891.

Twenty-first Police District.

	Total.	12,001 16,146 11,164 12,066 221,106 5,222 11,231 11,231 11,738 4,122 4,122 4,122 11,738 11,73	207,871
Septemb'r October. Novmber. December	Тејерропе.	1,030 584 955 124 1,763 1,051 1,651 1,651 1,651 1,677 1,604 1,004 1	17,665
2	.aogsW	6-6 -64-1 -655 6 6 74-174-11	97
rmber.	Telephone.	977 875 875 875 121 124 1,023 1,023 1,023 1,020	17,080
No	.подвW	7 014011 0001101-40000	12
oper.	Тејеррове	1,018 877 871 124 1,013 1,940 1,042	11,911
8	.nogsW	E 2 4 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
emb'r	Telephone.	995 995 996 1,779 1,779 1,910 1,024 1,025	17,504 104
e bi	.nogsW	1001108 2 7100400288891	8
August.	Тејерропе.	1,009 409 565 1,063 1,774 1,774 1,774 1,774 1,019 1,01	15,381
Au	Wagon.	0-0 8022-8 050-444-0-018	15
July.	Telephone.	1,008 638 638 638 1,262 1,762 1,762 1,482 1,482 1,001 264 1,001 264 1,00	15,744
_ ·	Wagon.	<b>∞</b> 01∞−∞010140 1-∞4 ∞00+004∞0+	16
June.	Telephone.	986 402 106 1122 123 143 1696 1696 11450 1133 1131 1905 1131 1905 1131 1905 1131 1905 1131 1905 1905 1905 1905 1905 1905 1905 190	16,481
ب	Wagon.	11.00 2 2 8 2 1 1 2 4 4 6 5 1 4 4 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	35
Мау.	Telephone.	1,015 576 924 924 1,051 1,058 1,058 1,007 1,038 1	18,607
	мякоп.	<u>∞ ∞6101∞46161</u> <u>∞ 1.4 1.8 ∞ 61∞44.6 ±</u>	8
April.	Тејерропе.	960 578 968 968 11,024 1,079 1,079 1,001 1	17,982
	.подя М	0 0 0001001001	83
March.	Telephone.	985 995 995 11035	18,258
1	.позвW	0 2	14
ruary.	Telephone.	914 929 929 929 921 1,873 1,873 1,873 1,420 1,420 1,420 1,093 1,093 1,093 1,229 1,229	16,632
Feb	Wagon.	9-0 4 4 1 10-8-948088141	188
January. February.	Telephone.	1,000 854 874 1,00 1,00 1,00 1,031 1	17,659
Jan	Wagon.	2331224 56671366	188
	LOCATION.	38d st and Woodland ave 52d and Walnut street 52d and Walnut street 60th and Market street 42d st and Baltimore ave 42d st and Baltimore ave 42d st and Baltimore ave 43th and Sanom street 45th and Sanom street 52d stand Market street 52d and Market street 52d and Market street 52d and Market street 52d and Market street 62d stand Woodland ave 62d and Woodland ave 63d and Woodland ave	Total
.xo	Number of B	113 165 165 173 173 173 173 173 173 173 173 173 173	j-

AUGUSTUS SIMPSON, EDWARD J. DONNAGHA, Operators. EDW. N. GIBSON,

Showing the number of Calls from each Box in the Police Signal and Telephone System, during the Year 1891.
Sixteenth Police District.

	Total.	13,000 10,000	204,893
Dec.	тејерропе.	7885 2788 8179 1,000 1,000 289 961 1,118 584 1,138 584 1,138 1,098 1,009	17,902
_	.позв.W	8 400000-0 CO44 440-0	8
Nov.	Тејеррове.	742 824 824 966 1,028 1,028 1,028 1,028 1,110 1,110 1,110 1,096 1,	16,995
~	.позв.W	417000004 :42010011 :::r	86
Oct.	Telephone.	1,146 738 738 738 738 71,146 71,145 747 767 777 777 777 777 777 777 777 81,118	17,080
١	Wagon.	100 500010 5000 40 6 6004000	128
Sept.	Тејерропе.	291 667 1,153 1,163 1,165 1,165 1,066 1,066 1,066 1,31	15,597
3Z	.позв.W	8 8 8 8 9 0 1 1 4 8 4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1	158
Aug.	Тејеррове,	247 442 1,734 1,734 1,734 1,734 1,74 503 653 688 88 630 630 88 1,179 1,179 1,179 1,409 1,674 1,674 1,674 1,674	14,560 158 15,597
4	Wagon.	400-4807-4900000 0 : 4 : 87-87-41	168
July.	Тејервове.	240 540 540 540 540 1,1464 1,1464 1,1464 1,1464 1,1464 1,1464 1,242 1,24	15,515
5	Wagon.	704 x 2 2 2 2 1 1 1 2 2 2 2 2 2 2 2 1 1 1 1	164
June.	Теlерьове.	1,139 7,50 7,77 1,696 1,110 261 747 747 747 747 1,086 838 1,086 1,086 838	16,473 164 15,515
ร	.подвW	800 842011800088 6 10 414088	195
May.	Telephone.	1,158 312 811 600 1,198 1,198 899 899 660 660 673 673 1,153 1,152 1,152 1,152 1,162 1,162	161 17,709
×	Wagon.	128 924011 1200 21 00 001808	191
April.	Тејеррове,	1,107 778 778 778 778 668 668 1,925 1,018 572 968 569 569 569 1,511 1,511 1,511 1,083 1,083 1,083 1,083 1,083 1,083 1,083	17,778
₹	.подвW	2000 2481 275000 04 811E	140
March.	Telephone.	229 839 606 606 1,011 294 1,091 1,091 1,011 1,510 1,51	17,996
ğ	.nogsW	9 2 88 4 4 88 6 6 6 6 6	26
Feb.	Telephone.	1,044 741 741 741 741 741 741 741 741 741 7	16,259
E4	. подвW	999499994 : 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0	102
Jan.	Telephone.	2,077 2,077 2,077 1,214 1,214 1,153 1,153 1,138 1,289 1,289 1,289 1,289 1,289 1,289 1,289	18,950
ı,	Wagon.	939409710 W W799 4 1 1 97018881	8
	LOCATION.	45th and Aspen streets	Total
	No. of Box.	22 22 22 22 22 22 22 22 22 22 22 22 22	

JAMES B. ROBINSON,
ROBERT CORRISTON,
JAMES L. WILSON,

Showing the number of Calls from each Box in the Police Signal and Telephone System, during the Year 1891.

Twentieth Police District.

WILLIAM NEWMAN, JOHN PEARSON, B. BERENS,

Showing the number of Calls from each box in the Police Signal and Telephone System during the Year 1891.

Phith Police District.

WILLIAM H. IRWIN, FRANK M. BVANS, WM. W. CRAIG,

Showing the number of calls from each box in the Police Signal and Telephone System during the year 1891.

Patrol No. 5. Second Police District.

	TOTAL.	8,813 8,643						18,464	12,998	141,903
ce'ber.	Telepbone.				1,206		-	1,213	1,208	12,707
å	Wagon.	400	17	61	178	-0	23°	43	9	243
Nove'ber. Dece'ber	Тејерропе.	757	98	720	1,507	391	1,150	1,159	1,161	12,242
No	Маgon.	126.	<u> </u>	46	<u> </u>	411	9	3°	<del></del>	216
October.	Тејерропе.	28 38 28 38 38 38	38	794	1,556	396	1.179	1,192	1,198	12,647
Oct	.позв.	229	× 4	8	==	40	7 F	840	0.44	230
Septe'b'r.	Теверропе.	755	<u> </u>	779	1,506	376	1,152	1,162	1,161	12,245
Sep.	.nogsW	প্রপ্র	10	22	22 23	90	9	80	- 0	182
August.	Тејерропе.	888	88	798	1,557	888	1,187	1,192	1,201	12,668
Αu	.позв W	82	4 5	67	85	r- u	. 4	3	<b>.</b> 00	
July.	Telephone.	787	8 8	781	202	88	1,216	1,226	1,119	12,715
ř	.mogaW	80	28	8	22	1	18	25	210	276
June.	Telephone.	759	755	773	1,512	368	1,100	1,159	1,159	12,238
Ju	Wagon.	ន្ត្រីន	2 9	21	12	1	21	8	3 00	177
May.	Тејерропе.	777	200	784	1,555	282	28	1,191	1,187	12,933
×	Wagon.	22	<b>7</b> 8	12	88		ಿ ಪ	92	9 60	8
April.	Тејерћове	752	8 2	750	1,503	752	1.141	1,14	1,140	12,436
₹	Маgon.	82:	13	22	123		. <del>1</del>	61		223
March.	Telephone,	<b>E</b> E!	EE	111	2,5 2,0 4,0 8,0 1,0	188	1.206	2,50	1,206	12,942
ž	Wagon.	22	17	8,	11,	-	12.4	45	34	182
r'ary.	Telephone.	472	473 273	516	¥ 8	555	999	614	88	7,897
Febi	.nogsW	80.00	- 61	9	8=		0	4		818
Sanuary. Febrary.	Telephone.	888	88	358	88 88 88	88	356	347	4	5,340
Jan	макоп.	223	5 7	8	-		- 27	180	0 4	. ₩
	LOCATION.	Bainbridge	11th and Washington ave	Charles a	Passyunk ave, & Catherine st Passyunk & Washington aves	4th and W	9th and Christian streets	7th and Ba	Delaware ave. & Christian st	Total
'x0	Number of b	14	46		52			627	64	1

George B. Zane, Charles S. Pope, John H. Stull,

Showing the number of calls from each box in the Police Signal and Telephone System during the year 1891.

Patrol No. 5. Nineteenth Police District.

	Total.	13,464 19,531 9,499 23,248 9,701 22,899 16,473 5,618	٠.
æ'ber.	Тејерьове	1,148 1,598 1,893 1,893 2,037 1,643 468	0
Ã	Wagon.	2244188	3
Nove'ber. Dece'ber.	Telephone.	1,073 1,512 886 1,900 1,435 460	100,0
Š	Wagon.	2000000 1 E	2
october.	Telephone.	1,172 1,616 1,880 1,884 1,895 447	3
. g	Wagon.	1275 6 5522	3
Septe'ber.	Тејерћове.	1,094 1,556 1,869 1,892 1,818 472	2
že pi	Wagon.	75 G I = 6 4 8 E E   8	8
August.	Telephone.	910 1,624 1,989 1,989 1,565 1,348 484	3
Ψn	.позвW	27740844 : 8	8
July.	Telephone.	982 1,663 818 2,013 7,27 1,753 1,450 484	2026
Ļ	.появот.	9 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	8
June.	Telephone.	1,109 1,552 1,777 1,851 1,734 1,734 1,331 460	2,000
Jan	.подя W	817488821 : 2	3
May.	Telephone.	1,198 1,601 778 1,998 801 1,951 1,315 1,315 1,315	01110
7	Wagon.	11714 118 6 8	3
April.	Telephone.	1,167 1,643 7,643 1,952 7,64 1,847 1,238 1,238	010,5
₹	Маgоп.	7188 - 748   8	5
arch.	Telephone.	1,183 1,827 772 1,989 1,968 1,355 483	E07101
Ä	.появи	0118 723	3
anuary. Febr'ary. March.	Telephone.	1,110 1,404 1,404 1,774 1,738 1,238 1,238	•
Fet	Wagon,	2222220	?
uary.	Telephone.	1,205 1,725 1,725 1,991 1,263 4,75 4,76	1
Jar	Wagon.	<b>∞28 ∞ 0</b> 5 2 2 2 1   5	
	LOCATION.	9th and Locust streets 8th and Sanson streets Broad and Plne streets 10th and Rodman streets 11th and Plne streets 11th and Locust streets 11th and Sanson streets	T OF SERVICE
.xo	Number of b	24 94 94 94 94 94 94 94 94 94 94 94 94 94	_

THOS. J. CHADWICK, JAMES M. BOYD,

Showing the number of calls from each box in the Police Signal and Telephone System, during the year 1891.

Patrol No. 6. First Police District.

		Jant	18ry.	anuary. Febr'ary.		March.	- <b>∀</b>	April.	K	May.	Ju	June.	July.		August.		Septe'ber.	96	October.	Nove,	Nove'ber Dece'ber.	)e08'bk	<u>;</u>	
:08														_										
I to redmuN	LOCATION.	.позяW	Telephone.	Wagon. Telephone.	.позяW	Тејеррове.	,позя W	Telephone.	маgоп.	Тејерћоле.	.позв W	Telephone.	Wagon. Telephone.	Wagon.	Telephone.	лозаW	Теlерропе.	.позв.	Тејерропе.	.позвW	Тејерропе.	Тедерропе.		Total.
121	2d and Webster streets	9	808			8	14	794	Ι.,	819	=	ι	1	1 .	1	1 2	789	20	800	6	808			19,668
_	25th and Christian streets	91	1,630	12 1,41	419 17	1,612	ន	1,590	8	1.630	18	1,594	1.(	644	21 1.652		1,579	16	1.500	16 1	1.599	_	978	19,232
123	6th and Bainbridge streets	6	813		<b>-</b> -	_	-	80		822	6		•			7		7	957	=======================================		_		10,599
125 1:	7th and Christian streets	<b>∞</b>	817					98		816	10		6					9	779	<b>∞</b>				19,624
	Sutherland and Catharine sts.	6	908		8			8		808	ī							7	876	5	1,149	_		10,473
_	Station House	12	1647	-i	436 16	٠.		1,596		1.617	17	_	∹		_	_	_	13	877	6	_			17,125
	Broad and Catharine streets	10	8	•				195		808	12		`_	_		_		12	974	16		18		10,577
243	streets	-	•	:	-	-	:		:		-			-				20	220	10	_	_		2,946
_	8th and Bainbridge	i	-	•	:		!	:	İ	1	:			1		-		9	261	7				2,134
<del> </del>	Total	12	1,38	54 6.387	73	7.291	18	7.172	13	7.318	1 2	7.080	12	2	7.419	16	7.129	12	1,996	16	9.374	9	9.486	92.378
		;			_	·	_	! -			-			_	:		: 	-		_				

ROBERT J. BELL, CHARLES S. SMITH, Operators.

Showing the number of calls from each box in the Police Signal and Telephone System, during the year 1891.

Seventeenth Police District.

	TOTAL.	11,765 12,434 12,548 12,554 8,889 7,501 15,580 15,580 11,685 11,685 11,498 14,307 6,851	119,604
e'ber.	Тејерћове,	1,021 1,206 788 784 797 790 790 790 7121 1,121 778 693 693	11,475
å	Wagon.	400000000000000	112
Nove'b'r. Dece'ber	Тејерропе.	1,018 1,172 1,175 775 775 476 767 767 767 767 768 864	11,141
Nov	Wagon.	242422150804108	66
ber.	Telephone.	1,103 1,103 1,102 1,242 1,021 1,604 1,604 1,504 1,202 1,202 1,202 1,202	11,738
š	Wagon.	6211 256 251185	121
Septe'b'r. October.	Telephone.	1,192 1,1123 1,1123 1,309 1,309 1,309 1,691 853 853 1,691 1,229	11,556
l deg	.подя.	00111147 MZ	115
August.	Telephone.	1,216 1,192 1,009 1,203 906 682 681 1,706 822 1,200 1,200	11,143
γnθ	.aogaW	111 123 133 133 14 16 16 17 18 19 19 19 19 19 19 19 19 19 19 19 19 19	96
July.	Telephone.	1,027 1,109 904 1,150 1,502 1,502 1,206 1,206	10,125
J.	.подя М		90
De.	Telephone.	8 1,102 5 11 7,167 10 11 1,167 10 6 772 6 772 6 8 823 7 6 823 7 7 823 7 8 1,116 88	10,113
June.	Wagon.	811118 11118 11118 11118 11118	88
May.	Telephone.	1,198 1,209 804 1,225 793 768 768 1,422 816 1,153 1,153	10,495
Ĕ	.nogsW	2011 5 c c c c c c c c c c c c c c c c c c	133
April.	Telephone.	1,087 758 1,190 758 778 778 778 1,399 763 1,029	899'6
Ā	Wagon.	320 00 00 00 00 00 00 00 00 00 00 00 00 0	8
March.	.P.elephone.	1,130 1,154 752 1,087 727 727 727 728 1,342 733 1,106 1,106	9,768
₽	.появМ	8 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	98
Febrary.	Telephone.	322 341 324 328 335 335 341 864 864	4,896
Feb	-появи	01 11 17 17 19 19	8
January.	Telephone.	339 339 339 695 345 334 334 334 334 345 346 346 346 346 346 346 346 346 346 346	6,218
Jan	Wagon.	82.04.0518	82
	LOCATION.	102 26th and Dickinson st 129 26th and Dickinson streets 129 26th and Morris streets 129 26th and Morris streets 139 38th and Wharton streets 151 38th and Morre streets 151 38th and Passyunk ave 152 25th and Passyunk ave 152 25th and Passyunk ave 153 25th and Anore streets 154 18th and Afton streets 155 25th and Afton streets 157 17th and Afton streets 158 17th and Afton streets 158 17th and Dickinson 168 18th and Dickinson 168 18th and Gray's Ferry 168 18th and Gray's Ferry 168 18th and Jackson)	Total
,xoc	Yumber of b	124 124 127 132 133 133 133 133 133 133 133 133 133	

WILLIAM PRIOR, CHARLES BLACK, Operators. JAMES J. IPE,

Showing the number of calls from each box in the Police Signal and Telephone System, during the year 1891.

Patrol No. 7. Twenty-fifth Police District.

		Total.	106 106 106 106 106 106 106 106 106 106	10,346
	er.		206 7792 7792 7792 747 747 747 747 747 807 717 807 811 807 811 811 911 960 960	1,048
	Dece'ber.	Telephone.	9 :: 8 9 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	<u> </u>
		макоп.		8 161
	Nove'ber.	Telephone.	214 214 738 739 739 777 777 407 777 407 710 620 620 620 620 620 620 736 736 736 736 736 736 736 736 736 736	10,498
		.подв.W	8 1-9990-0-1841-1913	125
	October.	.эпоффејет.	234 7399 8165 7765 7773 7733 7733 7735 7775 7775 77	11,040
	Ö	.nogaW	01	153
	Septe'ber.	Telephone.	2277 287 788 778 778 749 749 747 747 747 747 747 747 747 747	10,445
١	Sept	Wagon.	41800801108008888888	182
	August.	Telephone.	190 190 800 708 708 710 762 792 621 814 766 791 190 791 190 109 109	10,711
	Au	Wagon.	r-1000r00000448184 : r4	127
	July.	Telephone.	231 642 791 791 779 778 778 778 778 778 821 778 230 230 230 230 405 117 117	10,421
	r.	маgоп.	ro : 044 ro 00 00 00 00 00 10 10 10 10 10 10 10 10	123
]	June.	Telephone.	230 230 230 246 277 277 277 277 277 277 277 277 277 27	8,775
:	٦.	Wagon.	1110000017400041861 55	158
•	Мау.	Telephone.	225 772 772 783 783 783 783 783 783 783 783 783 783	9,076
١	Z	.nogsW		178
	April.	Telephone.	245 747 748 756 749 749 749 749 749 749 749 749 749 749	8,837
١	₹	.nogaW	2 41180000001400 2 2	178
	March.	Теlерьове.	247 773 777 777 777 777 777 777 830 777 830 777 844 864 420 119	9,154
	Ä	Wagon.	9100011100 <u>81011104</u> 3	123
	r'ary.	Telephone.	152 467 471 471 465 465 474 465 305 305 104 111 111 111 116 67 67	5,275
	Feb	Wagon.	1 67 4 4 8 8 1 2 6 8 6 7 1 1 6	97
	January. Febr'ary.	Telephone.	96 332 332 332 332 332 332 838 838 838 84 86 89 89 89 89 89 89 89 89 89 89 89 89 89	8,873
ŀ	Jan	.позвW	1 to 1 to 1 to 1 to 1 to 1 to 1 to 1 to	8
		L)cation.	Lancaster and Wharton sts.  'vartin's Village  'th and Dudley sts.  'isth and Jackson sts.  Sth and Dickinson sts.  Gha and Dickinson sts.  2d and McClellan sts.  Sth and Mifflin sts.  Sth and Mifflin sts.  The and Wifflin sts.  Reed st. and Delaware are.  Reed st. and Delaware are.  Reed st. and Delaware are.  Red at and Orgen are.  Stone House lane and P. R.R.  Stone House lane and P. R.R.  Stone House lane and are.  Stone House lane and are.  Stone House lane and are.  Commercial and Spreas are.  Commercial and Spreas are.	Total
	'X00	Vumber of l	21.24.24.24.24.24.24.24.24.24.24.24.24.24.	

EDWARD T. LEWIS, WM. B. MACTAGUE, SICHARD H. O'DONNEL,

Showing the number of calls from each box in the Police Signal and Telephone System, during the year 1891.

Patrol No. 8. Twenty-second Police District.

|  | . March   | ch. April.  
   
   
   | _   | May.  |  | June.  
   | July.  |   | August.   |   | Septe per.   
   | 5   | October.  | Nove  | er.   | Nove'ber. Dece'ber.   
   |   |
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Wagon. Telephone.	Wagon.	Telephone.	
   
   
   | Telephone.  | Wagon.<br>Telephone.  | . Макоп.   | Telephone.   
   | Wagon.   | Telephone.  | Telephone.  | .nogsW  | Тејерропе.   
   | Wagon.  | Telephone.  | Wagon.  | Тејерћове.  | Telephone.  
   | TOTAL.  |
| 000  | 500<br>  604  | 291   
   
   
   | 2000  | 04.   | 12823  | 221  
   | 00 CC 0  | <br>  287<br>  587  | 10.00   | 1   | i  
   | 299   | 230   | 2000  | 571   | 5 576   
   | İ.  |
| 400 01   | 4.10  | 230   
   
   
   | 571   | 4410  | 28.8   | 272<br>272<br>508  
   |  | 523   | 0.000   |   |  
   | 0110  | 585   | 001-  | 573<br>573<br>516   |   
   |   |
| 10 1C 4  | •   | 84 8 8<br>8 6 6 8   
   
   
   | 3 6 8 8<br>9 8 8 8  |   |  | |
   | × 0 1  | 347<br>310  | 4 89 89   |   |  
   | 20 O TO   | 84.0<br>84.0<br>84.0<br>84.0  | 4 4 60  | 332<br>305  |   
   |   |
| 1001   |   | 252   
   
   
   | 420<br>780<br>7420<br>7420  |   | -  |  
   | 200  | 810<br>432  | C 4 h   |   | •  
   | 15 œ  | 433   | <del></del>   | 883<br>883<br>883   |   
   |   |
| *63.50   | 9 0 0   | 1140  
   
   
   | 120   |   |  |  
   |  | 153   | 127   |   |  
   | - <del>c</del> c  | 785<br>1151   | <br>  | 115   | ' '-  
   |   |
| ر<br>د مر ه                                      | ত ক   | 772   
   
   
   | 720   |   | 47.  | 748  
   | <del></del>  | 178   | 200   |   |  
   | <u> အ</u> ထ   | 285   | 9101  |   | •   
   |   |
| 0400   |   | 1150<br>748<br>372  
   
   
   | 360   |   |  |  
   | <u></u>  | 149<br>956<br>748<br>385  | 92.8  |   | _  
   | 2044  | 961<br>748<br>372   | <del>0400</del>   |   | _   
   | 13,578<br>11,360<br>8,771<br>4,481  |
| 13,709 72 12,386                                 | 88  | 3,733 100   
   
   
   | 13,266  | 06 13,7   | 111  | 13,287   
   | 28 13,   | 730   | 4 13,7  | 31 123  |  
   | 138   | 13,752  | 62 13,  | l   | 1 13,525  
   | 162,619   |
| Pier   85 88 82 88 82 88 82 88 82 88 82 82 82 82 | 38W   20042000040004000   5   5   5   5   5   5   5   5   5 | 'BaW         0.00         4.00 <th< td=""><td>  MagW   Nagw   /td><td>  Telepton   Telepton</td><td>Wagy  Telep  Tel</td><td>Wagy  Telep  Tel</td><td>Wagy  Telep  Tel</td><td>  Mag/  
Mag/   Mag/  </td><td>  Mag/  </td><td>  Mag/  </td><td>  Magg</td><td>  Tole  </td><td>  Tole   Page   Tole   Page   Tole   Page   Tole   Page   Tole   Page   Tole   Page   Tole   Page   Tole   Page   Tole   Page   Tole   Page   Tole   Page   Tole  
Page   Tole   Tole   Page   Tole   Tole   Page   Tole   Page   Tole   /td><td>  Total Color  </td><td>  Total Color  </td><td>  Total Color  </td><td>  Total Color  </td></th<> | MagW   Nagw   Telepton  
Telepton   Telepton | Wagy  Telep  Tel | Wagy  Telep  Tel | Wagy  Telep  Tel | Mag/   Mag/ | Mag/  
Mag/   Mag/ | Mag/   Mag/ | Magg | Tole   Tole | Tole   Page   Tole   Tole   Page   Tole   Tole   Page   Tole   Page   Tole   Total Color   Total
Color   Total Color   Total Color   Total Color   Total Color   Total Color   Total Color   Total Color | Total Color   Total Color | Total Color   Total Color | Total Color   Total Color |

E. S. Read., H. Gekler, C. Shaw,

Showing the number of calls from each box in the Police Signal and Telephone System, during the year 1891.

Patrol No. 9. Twenty-third Police District.

		Total.	10,624 13,172 13,172 13,706 16,629 10,967 10,967 11,540 12,144 14,084 13,089 14,251 14,251 14,251 14,251 14,251 14,251 14,251 14,251 14,251 14,251 14,251 14,251 14,251 18,000 18,000	168,924
ľ	e'ber.	Теlеррове	849 1,083 1,168 1,158 1,156 1,561 1,661 1,661 1,673 1,173 1,173 1,173 1,173 1,273 1,223 1,233 1,	14,456
	<b>D</b>	Wagon.	<b>ಚರ್</b> ಡ4∂ :⊄44 :4∞೧೮೮೮೮	28
	e'ber.	Telephone.	752 993 1,121 1,443 1,364 1,028 715 1,146 1,146 1,211 1,211 1,211 1,213 883 893	13,715
1	Nov	Wagon.	.vक्कक : ७०क : लाग : छल	3
	October. Nove' ber. Dece' ber	Тејерћове	1,035 1,152 1,161 1,161 1,572 1,006 1,296 1,296 1,296 1,246	14,681
ł	Oct	Wagon.	298411196	8
	Septe'ber.	Тејерропе.	711 1,029 1,139 1,284 1,284 1,284 1,182 1,182 1,182 1,234 1,	13,589
	Şebt	Wagon.	01 11 11 12 13 13 13 13 13 13 13 13 13 13 13 13 13	8
	August.	Тејерћопе.	453 1,078 1,165 1,165 1,362 202 202 203 786 1,107 1,290 1,084 1,381 1,381 1,381 680	12,801
	Ψn	Wagon.	800 00 00 00 00 00 00 00 00 00 00 00 00	16
	July.	Тејерропе.	616 1,146 1,146 1,162 1,379 1,089 1,089 1,155 1,155 1,155 1,156 1,157 1,157 1,157	13,084
	ñ	Wagon.	241-840 8 20 : 8 72 7- 7 7	192
	June.	Тејерропе.	869 1,130 1,146 1,146 1,575 1,575 1,112 1,112 1,113 1,118 1,118 1,118 1,118 1,118 1,118 1,118 1,118 1,118	14,141
	ñ	.позв.W	104 ELL 000 40004	15
	Мау.	Telephone.	1,058 1,131 1,166 1,166 1,165 1,163 1,163 1,189 1,189 1,189 1,189 1,189 1,189 1,229 1,229 1,320 1,320	14,811
١	2	.nogsW	87-77-7-7-7-8	101
	April.	Telephone.	1,128 1,128 1,128 1,538 1,538 1,700 658 823 769 1,130 1,132 1,132 1,132 1,132 1,132 1,132 1,132 1,132	14,588
		Wagon.	8651234108 :00 CST	9
	March.	Telephone.	1,097 1,131 1,198 1,498 1,672 672 1,129 1,126 1,126 1,126 1,152 1,152 1,152 1,152	14,702
1		.позвW	2 351 57711379	2
	Febrary.	Telephone.	1,009 1,023 1,023 1,649 1,649 1,649 1,022 1,022 1,022 1,038 1,038 1,046	13,150
١		.позвW	2000 200 200 1	4.
	January.	Telephone.	1,038 1,109 1,109 1,789 673 873 873 873 874 1,139 1,159 1,159 1,164 1,16	14,338
-	Jan	Wagon.		4
		LOCATION.	22d street and N. College ave 24th and Wright streets 18th and Selbert streets 23th street and Columbia ave 23th and Referent adversets 24th and Jefferent streets 27th and Jefferent streets 27th and Jefferent streets 28th street and Girard ave 28th street and Girard ave 28th street and Girard ave 28th street and Girard ave 28th street and Columbia ave Wellington and Oxford streets Woodstocks t. & Montgoury av Woodstocks t. & Montgoury av Woodstocks t. & Montgoury av Woodstocks t. & Montgoury av Sight and Nicholas streets 6th and Nicholas streets	Total
	.xo8	Number of I	222 222 222 222 222 222 222 222 222 22	

WILLIAM BABE, JR., GEORGE B. SESINGER, ALFRED CRAIGHEAD,

Showing the number of calls from each box in the Police Signal and Telephone Syste..., during the year 1891. Patrol No. 10. Twenty-fourth Police District.

	Total.	8,191 6,216 6,216 6,189 6,884 6,884 10,387 10,387 10,387 8,239 8,239 8,239 8,239 8,239 8,239 8,239 8,239 8,239 8,239 8,239 8,388	108,371
ember	Telephone.	620 8341 8381 8381 8384 8384 8384 8384 8386 8386 8386 8386	8,201
Dec	.nogaW	7000441100 H00 H00	67
Novemb'r December	Telephone.	6111 473 378 378 378 477 631 759 636 626 626 636 637 631 631 631 631 631 631 631 631 631 631	8,130
Nov	Wagon,	<b>₩</b> −₩−₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩	22
October.	Telephone.	616 471 380 891 424 626 626 627 627 627 627 627 627 627 627	8,194
	.позв.	84184000 4000 0	38
Septemb'r	Тејернопе.	601 883 888 888 888 888 888 618 618 600 600	8,111
Sept	. "позвW	800 00 00 00 00 00 00 00 00 00 00 00 00	81
August.	Telephone.	660 525 525 525 641 641 641 644 644 662 663 664 664 664 664 664 664 664 664 664	8,642
Ψn	Wagon,	0-040440 :0000040	79
July.	Telephone.	671 520 520 530 646 622 810 810 810 681 681 682 683 685 685 686	8,706
r	•позвW	7-8 :47-011 11-8 94-12E	73
June.	Telephone.	724 420 420 420 420 420 420 680 680 680 680 710 738 738 738 738 738	9,405
·5	Wagon.	4.0 : 8 - 8 - 8 - 8 - 8 - 8 - 8 - 8 - 8 - 8	53
May.	Telephone.	751 562 483 501 698 977 483 784 778 778 778 778 778 778 778 778	10,003
≅	.позвW	41140000101010000	74
April.	Тејерропе.	730 550 446 446 653 703 673 703 7140 7140 724 724	9,706
⋖	.nogsW	70-1-804-75 12 12 80 144 144 144 144 144 144 144 144 144 14	7
March.	Тејерропе.	745 445 445 670 670 700 970 770 770 740 740	9,977
*	.позяW	1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	19
February	Telephone.	689 4413 4413 4413 615 615 690 690 690 660	8,793
Feb	.позв W	2000 1-04004 100	8
January.	Telephone.	735 555 4613 4613 4613 710 655 710 710 710 710 710 710 710 710 710 710	9,740
Jar	.позвW	<u>ю</u> ннадоба Ни юна	47
	LOCATION.	Richmond and Allegheny av. Richmond and Tioga streets. Trenhon ave, and Tioga street Allegheny ave, and Jioga street Somerset and Palethory sts Somerset and Palethory sts Somerset and Orkney streets. Kensington ave, and "C" st Somerset and Gand streets Fifth street and Orkney streets Fifth street and Cambria streets Fifth street and Indiana ave. Howard and Cambria streets Lehigh ave, and Thompson st Lehigh ave, and Auburn st	Total
'X00	Number of 1	24444445555555555555555555555555555555	_

WM. L. HARMER,
JAMES CUMMINGS,
GEORGE W. GENTEL,

Showing the number of calls from each box in the Police Signal and Telephone System during the year 1891.

Patrol No. 11. Ninth Police District.

		TOTAL.	14,209 10,099 12,5972 18,014 18,014 18,014 22,570 22,570 24,638 8,947 4,016 8,747 4,016 8,747 4,016 8,747	238,275
	her.	Telephone.	1,189 831 1,912 1,059 1,518 1,505 2,278 1,733 2,289 1,733 2,289 1,733 3,918 3,918 801	20,004
	Dec'eber	Wagon.	222 223 223 23 23 23 23 23 23 23 23 23 2	171 2
		Telephone.	1,190 829 829 1,682 1,682 1,483 1,483 1,741 1,741 1,741 1,303 1,005 1,005 1,005 1,106 1,106 1,741 1,106 1,10	19,881
	Nove'ber.	Wagon.	8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
	-i-	Тејерћове.	1,207 869 1,939 1,049 1,519 1,548 2,287 1,296 2,037 741 399 341	19,871 131
1	October.	Wagon.	22221441 80 1222 82 82 82 82 82 82 82 82 82 82 82 82	188
ŀ	Septe'ber.	Telephone.	1,186 837 1,918 1,918 1,462 2,218 2,218 1,278 2,039 2,219 330 688	19,524
ł	Septe	Wagon	8 :0 1 1 1 2 2 2 2 2 2 3 2 3 2 3 2 3 3 3 3 3	222
	August.	Тејерћопе.	1,102 823 1,046 1,626 1,526 2,186 1,301 2,190 2,190 1,301 2,031 2,031 841 671	19,301
	Pπ	Wagon.	41 1 1 1 1 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3	0 176
	ķ	.өподфер	1,193 849 1,947 1,018 1,018 1,573 2,320 1,720 2,170 2,170 2,015 2,015 380 380 801	19,920
	July.	Wagon.	4 12 12 12 12 12 12 12 12 12 12 12 12 12	186
	June.	Telephone.	1,190 832 1,941 1,013 1,520 1,520 1,638 2,172 1,638 2,172 1,638 1,	19,751
	Ju	Wagon.	423 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	0 201
	May.	Telephone.	1,210 840 1,448 1,112 1,513 2,305 1,729 1,729 2,039 2,039 2,038 2,038 3,71 8,71 8,71 8,71 8,71 8,71 8,71 8,71 8	20,040
	M	Wagon,	2 : : : : : : : : : : : : : : : : : : :	4 189
	April.	Тејерћопе.	1,187 1,187 1,188 1,015 1,148 1,148 1,158 1,168 1,	3 19,614
	₹	.подв.W		26 143
	March.	Telephone,	3 1111313	3 20,026
		.nogaW	88 82 22 22 22 22 22 22 22 23 33 33 33 34 45 45 45 45 45 45 45 45 45 45 45 45 45	9 143
	d'ary.	Telephone.	1,100 1,	5 18,219
	Fe	.позаW	:: 8	2 125
	January. Febr'ary.	Тејерропе.	1,209 868 1,954 1,054 1,510 1,705 1,	20,112
	Jai	м авоп.	40 10 10 11 11 11 11 11 12 13 13 14 14 15 16 16 16 16 16 16 17 17 17 17 17 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18	. 137
		Location.	26th and Perot streets	Total
	.100	Numberof	6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	

WM. H. FRANCIS, JR., Soperators. Gro. W. Morris,

Showing the number of calls from each box in the Police Lignal and Telephone Lystem, during the year 1891.

Patrol No 12. Fifteenth Police District.

	Jan	uary	Feb	fanuary. Febrary.	March.	cp.	April		May.		June.	-	July.	At	August.	Septe	Septe'ber. October.	Octo		ove'b	ë. D	Nove'ber. Dece'ber	<u></u>
Госацов.	Wagon.	Telephone.	Wagon.	Тејерропе.	.nogsW	Telephone.	.позвW	Telephone.	Telephone.	i	Wagon. Telephone.	.nogsW	Telephone.	.подв W	Тејерропе.	.nogsW	Telephone.	Wagon.	Telephone.	Wagon.	<del>i</del>	Wagon, Telephone,	1 14 T
Frankford avenue and Bridge	- 00	908	-10	728	1 :9	88	 	188		:  %%	1	780	808	ļ	88	107	88	:0	:   % &   % &	1:1-	88		
Orthodox and Edmond streets	00.0	808				98	41					4.	200		908	~	88	91	908				
Bridge and Tacony streets Church and Tacony streets	-10	620	# ==		7 10	2 2 3 3 3 3	ดิ จีจี		- 00		× 9	3 9	28		200	04 03	88	- 4	200	מוני		4 60	
214 Orthodox and Pearce streets	-	908			. 0	_:_	: 0					200	200	_:_		64.0	88	4:	908				
312 Tackawanna & Linden streets.		808	1	728	ာ က		<del>-</del>			_ ;		• - • •	908	767		7	88	101	908	101	_:		
A	10 i	808					9 :		_ :	<u></u> ,		7 ; 8 :		<u>:</u>				4	908			40 88	806 9,535 806 816
Total	24	6,882	92	6,272	183	6,882	22	860 35	5 6,882	l	29 6,660	20	6.882	24	6.882	%	9.660	°	6.882	29	6.660 4	45 7.6	7.688 82.245

CHAS. B. SHALLCROSS, ALCOM MURRAY,

Showing the number of calls from each box in the Police Signal and Telephone System, during the year 1891.

Patrol No. 13. Eighteenth Police District.

i		Total.	18,862 14,074 8,990 13,707 13,707 13,789 13,789 18,879 18,879 18,617 2,968 68 68 68 10,090	166,236
	Dece'ber.	Тејерћопе.	1,567 1,168 1,168 1,156 1,156 1,566 1,566 1,566 1,568 1,573 22 22	13,813
	ದ್ದಿ	Wagon.	217 26 88 100 100 100 100 100 100 100 100 100	,375 243
	Nove'ber.	Тедерьове.	1,518 726 726 1,114 1,114 1,724 1,524 1,516 1,51	13,375
	Nov	.поза W	55 1111 65 15 15 15 15 15 15 15 15 15 15 15 15 15	97
	October.	Тејерћопе.	1,576 1,167 1,167 1,152 1,157	13,748
	8	.подяW	882222282228222	282
	Septe'ber.	Telephone.	1,672 727 727 1,118 1,118 1,118 1,581 1,58	13,865
	Sept	Wagon.	26 26 26 26 26 26 26 26 26 26 26 26 26 2	88
بمص بمض	August.	Теlерьопе.	1,587 1,185 1,185 1,161 1,161 1,163 1,563 1,563 1,577 201 8	13,880
	Ψn	Wagon.	588 824407 881 810 810 810 810 810 810 810 810 810	293
	July.	Теlерьопа.	1,568 1,164 1,164 1,153 1,154 1,154 1,167 1,167 1,568	13,773
3	J	•позв.W	8777946708889481	257
1	June.	Telephone.	1,517 1,133 730 1,125 1,125 1,527 1,528 1,	13,413
3	ř.	.подвW	816 94 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	88
Tribucation I come	Мау.	Тејерропе.	1,577 1,173 1,157 1,151 1,151 1,150 1,579 1,580 243 83 83 83 83 83 83 83 83 83 83 83 83 83	13,925
4	24	.nogaW	28404088844689198	274
•	April.	Telephone.	1,53 733 733 71,127 1,127 1,089 1,089 1,502 1,88 1,88 2 5 5 8	13,227
5	¥	Wagon.	23 16 16 16 16 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18	88
מינו מו דומי	March.	Тејеррове.	1,572 1,173 682 1,173 1,160 1,173 1,159 1,580 1,560 1,	13,868
		.nogsW	288 118 118 118 119 119 119 119 119 119 1	244
	Febr'ary.	Telephone.	1,441 1,058 682 1,057 1,047 1,087 1,497 1,483 1,	12,882
	Fet	.подвW	8847 cs 4 27 - 81 2 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	233
	January.	Telephone.	1,589 1,167 1,157 1,158 1,158 1,158 1,578 209 1,573 209 1,573 1,57	13,858
	Ja	.подв.	88 90 10 10 10 10 10 10 10 10 10 1	234
		<b>L</b> осатюм.	3 Third and Norris streets	Total
ļ	*X00	Number of 1	241 6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	

JOHN L. COON, CHARLES FOWLER, JAMES NICE,

Showing the number of calls from each box in the Police Signal and Telephone System, during the year 1891.

Patrol No. 13. Twenty-sixth Police District.

'xog		Jar	January. Febrary.	Febr		Магсћ.		April.	<b>—</b>	May.		June.	July.		August.		Septe'ber.	<u></u>	October.	×	Nove'ber. Dece'ber	Deck	yber.	
Number of H	LOCATION.	.nogaW	Тејерропе.	.позв.W	Telephone.	.позв.W	Telephone.	Wagon. Telephone.	Wagon.	Тејерћове.	.nogsW	Telephone.	Wagon.	Telephone.	Wagon.	Telephone.	Wagon. Telephone.	Wagon.	Телерьове.	Wagon.	Тејерћове.	.nogaW	Тејерћове	Total.
1 -10		1-;		000	1,060	100	173	12,	8 8		99	1,138	99	1,176	9:	'	1,1	88	11.	175	1,135	00 9	1,173	13,888
	Huntingdon and Emerald sts. Cedar and Norris streets	=	1,573	۰ ;	1.423	201	575	9 :	522 522 22	-	N 0	1,524	2 :	1,091	2 -	578	-î-i	522	, , , ,	- m - m	1,143	7 co	764	16,545
	erald and Dau	٠ د	832	-	156	9	835	2	20	83	=	813	9	832	10	4		3 80	88	20	8		832	9,901
និន	Blair and Norris streets		1,172	<u> </u>	1,062	4.0	174	 	137	1,17	0.4	1,134	4 4	1,174	<del>~</del>	~ ~	<del>-</del>	746	- F	174	1,184	4-	1,173	13,854 9,093
	dams a	~	1,172	8	1,059	4	174	1	132	1,171	_	1,133	67	1,172	4	174	2,11		_	4	1,133	-	1,165	13,818
	gdon and	:	1,170	8	1,059	4	,174	1,1	140	1,174	œ ·	1,140	6	1,179	9		_		1,17	21	1,135		1,168	13,886
	and Trento	<del></del>	169	99	969	9	773		47	77		743	×	775	4	[]		-		_	414	-		8,4/2
750	Jumperisha sha Jasper sus		:			:		:	:						:			-	*				711	1,512
		31	10,220	31	9,236	40	3,229	36	894 34	10,228	4	668'6	57	0,246	50 10	687	19	9,919 52	6	,825 58	8 9,140	0 53	9,418	119,027
			_			_	_	_	_	_	_	_		-	_		_	_				_		

WILLIAM C. McCay, JAMES M. TRINDLE, Soperators.

Showing the number of calls from each box in the Police Signal and Telephone System, during the year 1891.

Patrol No. 14. Fourteenth Police District.

OLIVER SKILTON, WILLAM M. WILSON,

Showing the number of calls from each box in the Police Signal and Telephone System, during the year 1891.

Patrol No. Eleventh Police District.

	Total.	9,096 11,824 11,824 7,927 6,789 12,848 12,628 2,936 8,981	92,220
ember	Telephone.	743 1,162 1,060 751 757 763 972 985 1,144 1,654	10,953
Pe	.подяW		
emb'r	Тејерћове.	762 1,149 978 624 757 757 988 976 1,166 1,659	10,759
Nov	.подвW		
Septemb'r October. Novemb'r Decembe	Telephone.	751 1,170 1,075 510 784 769 1,004 1,037 626 875 875	9,194
8	.nogsW		
emb'r	Telephone.	765 1,102 1,045 547 727 979 994	6,875
ge b	.dogsW		:
August.	Тејерропе.	756 935 935 935 935 706 850 823	6,297
Ψn	.nogsw		
July.	Telephone.	730 810 1,022 1,02	6,478
٠,	nogsW		
June.	Telephone.	730 1,014 915 529 661 413 987 1,076	6,325
ř	.подв.W		
May.	Telephone.	794 1,169 943 769 769 421 1,178	7,240
ے ا	.nogsW		
April.	Тејерропе.	742 1,128 844 761 764 405 1,153 1,154	6,941
4	Wagon.		
March.	Telephone.	791 1,104 1,104 785 785 785 1,202 1,202	7,485
1	.nogaW		
February	Telephone.	698 1,655 967 690 871 1,052	6,586
Fel	.позв.W		
anuary.	Telephone.	754 1,118 1,047 763 763 408 1,127 1,117	7,087
Jar	,подв.W		
	Location.	Laurel and Frankford ave	Total
	Number of b	122 73 73 73 68 68 68 68 83 83 83 83 83 83 83 83 83 83 83 83 83	

LORENZO F. WILSON, CHARLES C. KENNEY, Operators.

Showing the number of calls from each box in the Police
Signal and Telephone System, during the year 1891.

P trol No. Tenth Police District.

X.		November	December	
Number of box.	LOCATION.	Telephone.	Telephone.	Total.
412	Front and Girard avenue	1,188	1,864	2,55 <b>2</b>
418	Front and Laurel streets	594	682	1,276
414	Beach and Poplar streets	497	654	1,151
421	Second and Girard avenue	1,782	2,015	3,797
422	Second and Beaver streets	1,654	1,975	3,629
<b>42</b> 3	Fourth and George streets	1,075	1,245	2,320
431	Fifth and Girard avenue	1,614	1,733	8,847
432	Fifth and Oxford streets	541	584	1,145
512	Germantown road and Jefferson street	543	683	1,176
518	Fourth and Master streets	891	972	1,863
521	American and Master streets	1,068	1,244	2,382
522	Mascher and Oxford streets	496	582	1,078
	Total	11,988	18,688	25,666

JAMES DOUGHERTY, Coperators.

76

205 21,144 1 Total. December. Showing the Box in each District having the Greatest Number of Wagon Calls during 1891. November. October. September. 8218814461278212664 48r.SnA Jaly. June. 82688758768877876837 May. .lrrqA 1485288350 25225150 47 March. February. 27482128822217766618 1822 January. Second and Arch streets
Eighteenth and Lombard streets
Ninth and Market streets
Twenty-fourth and Callowhill streets Fwenty-fifth and Christian streets... Third and Norris streets. Eighth and Sansom streets. ...... Frankford avenue and Oxford pike..... Fittieth street and Lancaster avenue...... Broad and Reed streets Twentieth and Market streets..... Thirty-first street and Girard avenue...... Thirty-second and Market streets..... Richmond and William streets...... Seventh and Bainbridge streets. Sixth and St. Mary streets...... LOCATION. Ninth and Dauphin streets. Chelten avenue—Engine 19. Number of box. Sixth. Ninth Fifteenth Sixteenth Seventeenth..... Eighteenth..... Fwentieth...... Twenty-sixth..... Fourth Fifth ..... Fourteenth ..... wenty-second.... DISTRICTS. Fwenty-first ... wenty-third wenty-fifth. Pird

1891.
Year
the
for
Patrols
Various
of the
of
Calls
Wagon
of
Synopsis
Š

		No. 1	No. 1 PATROL.	O.L.			No.	2 PATROL	.0I.			Ä.	No. 3 PATROL.	SOL.	
Months.	Conveyance of Prison-	Conveyance of Injured Persons.	Conveyance of Officers to and from Fires.	Miscellaneous.	Total Wagon Calls.	Conveyance of Prison- ers.	Conveyance of Injured sense.	Conveyance of Officers to and from Fires.	Miscellaneous.	Total Wagon Calle.	Conveyance of Prison- ers.	Conveyance of Injured Persons.	Conveyance of Officers to and from Fires.	Miscellaneous.	Total Wagon Calls.
January	\$16	72	\$1	#	815	75	83	20	2	127	73	22	9	182	122
February	391	22	15	458	916	92	19	4	6	88	8	क्ष	တ	31	147
March	364	2	61	467	28	99	18	61	11	6	88	8		22	131
April	394	8	38	88	926	86	ĸ	8	R	150	130	21		22	173
May	381	29	ĸ	420	<b>3</b> 5	84	27	9	88	158	149	16	က	9	208
June	452	œ.	18	458	1,096	84	33	91	21	120	167	ŝ	9	윦	247
July	431	79	31	541	1,082	8	8	TO.	72	145	160	17	80	37	226
August	694	35	88	814	1,628	105	11	89	24	143	141	63	4	31	205
September	208	92	83	817	1,624	93	83	н	18	140	134	12		37	192
October	429	47	19	495	066	6	98	10	8	158	115	98	4	22	170
November	432	8	22	456	972	53	83	63	15	107	*8	8	7	36	138
December	200	78	32	612	1,224	83	21	9	83	142	8	4.	0.	೫	139
Total	5,464	88	278	6,527	18,097	1,004	286	129	265	1,605	1,413	281	20	354	2,098

April	S 22 88 82 82 82 82 83 82 83 82 83 83 83 83 83 83 83 83 83 83 83 83 83	No Series of Conveyance of Officers of Conveyance of Officers of Conveyance of Officers of Conveyance of Officers of Conveyance of Officers of Conveyance of Officers of Conveyance of C	The smooning of the second of	Total Wagon Calls.	Conveyance of Prison-ers.	Conveyance of Injured S 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	No more resonance of the control of	Pi Miscellaneous.	Total Wagon Calls.	-nosire of oneyeance of Prison-sers.	Conveyance of Injured S & S & S & S & S & S & S & S & S & S	S. S. S. S. S. S. S. S. S. S. S. S. S. S	7. S S S S S S S S S S S S S S S S S S S	
Total 3,8	3,565 640	8	3	4,725	3,611	- 194	8	416	4,620	1,689	311	9	"	274

Synopsis of Wagon Calls of the Various Patrols for the year 1891.

		No.	No. 7 Patrol.	101.			No.	No. 8 Patrol.	0 <b>Ľ</b>			No.	No. 9 PATROL	80L.	
Момтнв.	Conveyance of Prison- ers.	Conveyance of Injured Persons.	Conveyance of Officers to and from Fires.	Miscellaneous.	Total Wagon Calls.	Conveyance of Prison- ers.	Conveyance of Injured Persons.	Conveyance of Officers to and from Fires.	Miscellaneous.	Total Wagon Calls.	Conveyance of Prison- ers.	Conveyance of Injured Persons.	Conveyance of Officers to and from Fires.	Miscellaneous.	Total Wagon Calla.
Tannary	46	8	-	18	8	8	15	10	00	22	32	14	•	12	61
	8	18	67	17	8	32	2	8	•	72	\$	4		91	22
March	8	88	63	18	128	*	12	64	<b>«</b>	86	\$	•	-	11	71
-	8	8	œ	88	168	69	8	-	10	100	88	15	-	12	115
	8	*	6	8	178	2	19	•	4	8	78	•	œ	31	121
June	88	75	63	49	158	<b>8</b> 8	18	10	œ	119	26	••		2	11
	28	ន	*	\$	125	85	র	-	==	128	88	18	7	23	180
August	7.	ĸ	64	98	127	88	71	64	10	114	88	91	61	13	108
	122	56	61	82	182	86	7	10	•	821	76	22		=	101
	84	22	Ī	\$	163	101	17	90	12	130	1#	2		2	82
November	79	83	89	22	125	88	16	89	4	62	23	22	-	7	19
	120	22	. !	7	161	75	11	4	10	101	22	11		12	78
	1,004	88	8	98	1,698	867	81	33	**	1,182	707	182	15	185	1,089

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Synopsis of		agon	Wagon Calls of the	18 of	the V	arion	Pal	role	for th	Various Patrols for the year 1891.	1891				
		No. 1	No. 10 PATROL.	0.			No. 1	No. 11 PATROL	10L			No. 1	No. 12 PATROL.	OI.	
Монтня.	Conveyance of Prison-	Conveyance of Injured Persons.	Conveyance of Officers to and from Fires.	Miscellaneous,	Total Wagon Calls.	Conveyance of Prison- ers.	Conveyance of Injured Persons.	Conveyance of Officers to and from Fires.	Miscellaneous.	Total Wagon Calls.	Conveyance of Prison- ers.	Conveyance of Injured Persons.	Conveyance of Officers to and from Fires.	Miscellaneous.	Total Wagon Calls.
January	25	7	-	12	8	91	8	67	133	187	8	15	-	12	92
February	25	==	-	14	78	78	8	89	18	125	88	•	i	•	2
March	73	12	-	16	102	86	Z	60	8	148	\$	10	-	12	89
April	29	15	က	33	111	104	11	က	19	148	8	16	•	19	89
Маў	79	16	က	32	133	134	×	i	22	189	\$	16	10	7	8
June	8	6	63	22	107	153	ຂ	89	15	201	8	17	-	က	8
July	88	ន	-	56	139	139	8	-	10	186	88	18	69	6	8
August	96	21	9	11	140	126	\$	67	•	176	22	83	60	-	8
September	101	17	-	15	140	169	88	61	16	322	#	82		7	88
October	82	15	-	8	118	130	37	7	19	188	7	17		6	67
November	99	16		2	8	38	19	60	14	131	84	13	-	10	67
December,	73	88	6	=	124	135	88	က	10	171	51	0.	4	90	73
Total	006	197	83	251	1,877	1,452	359	27	174	2,012	468	172	12	103	770

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Synopsis of Wagon Calls of the Various Patrols for the Year 1891.	the V	arion	18 Pc	utrols	for t	he Yea	r 18	91.			
		No. 1	No. 13 PATROL.	ROL.			No. 1	No. 14 PATROL.	ROL.		
Монтия.	Conveyance of Prison- ers.	Conveyance of Injured Persons	Conveyance of Officers to and from Fires.	Miscellaneous.	Total Wagon Calls.	Conveyance of Prison- ers.	Conveyance of Injured Persons.	Conveyance of Officers, to and from Fires,	Miscellaneous.	Total Wagon Calis.	Tora Wago Calla
January	202	19		#	265	31	4	2	60	40	2,67
February	200	25	61	37	797	25	60	i	7	4	2,72
March	204	83	7	22	284	43	က	က	15	2	2,96
April	257	19	-	42	319	\$	ĸ	20	80	49	3,38
May	220	z	9	19	308	62	16		12	8	3,57
June	727	47	9	49	329	29	91	10	18	92	3,57
July	240	ĸ	9	3	314	102	10	တ	7	124	3,61
August	252	31	6	4	343	25	01	-	01	12	4,20
September	252	83		8	340	78	-	67	72	108	4,28
October	210	22	67	<b>\$</b>	75	62	6	က	12	88	8,40
November	226	11	es	22	298	3	60	4	œ	99	2,98
December	212	32	•	8	236	11	10	7	1	8.	3,74
Total	2,702	328	120	572	8,658	089	8	35	135	930	41,12

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19,027 16,897 16,897 14,682 14,682 17,148 27,148 27,148 27,148 18,283 19,390 17,371 17,371 17,371 17,371 17,371 17,371 17,371 17,371 17,371 17,371 17,371 17,371 17,371 17,371 Total. Showing the Box in each District having the Greatest Number of Telephone Calls in 1891. December. November. ទី**ខែនៃខ្លួ**ន្តីង October. 23,47 23,47 23,47 23,47 23,47 23,47 69 September. vaenSny Jaly. Jane May. **5**5888 .lingA March. 8 2 4 4 8 4 8 8 February. January. Marlborough and Beach streets...... 25th and Christian streets..... 2d and Girard ave..... Germantown ave. and School Lane .... 36th and Rockland streets..... Passyunk ave. and Catharine streets... Frankford ave. and Oxford street ...... 6th and Race streets..... LOCATION. Number of box. Fifth Sixth Ninth Chird..... Fourth Tenth..... Eleventh..... Fourteenth ..... Fifteenth Sixteenth ...... Eighteenth ....., Twenty-fourth Seventeenth.... I'wenty-second DISTRICTS. Iwenty-third. Twenty-first... Twentieth.... Twenty-fifth ... Nineteenth

## Summary of Operations of the Fire Telegraph, 1891.

Months.	First. alarms sounded.	Second alarms.	Third alarms,	Fourth alarms.	False alarms.	Total.
January	40	1	1			42
February	87	8				<b>4</b> 0
March	44	2				46
April	49	2	1			52
May	63	3				66
June	68	2	 			70
July	47	4				51
August	43					46
September	28	2	1	1		32
October	81					31
November	46	2	1			49
December	64	8	2			69
Total	560	24	6	1		591

Showing number of Alarms for each Hour of the Day for the year 1891.

.fal.	οT	43	9	46	22	99	20	21	43	32	31	49	69	591
tal Alarma.	To Vight	ĸ	82	31	38	88	40	88	29	10	17	24	37	325
	10	-	69		-	က	-	-	•	i		-	8	12
	4		61	-	,-	-	69	61			61	-	10	17
Ä	8		-		67	67	63	-	-	i	60	-	67	15
A. M.	81		•	83	es	2	2	-	64	-	60	2	တ	22
	-	-	-	-	_	67	9	က	-	m		9	61	22
	21	9	က	9	н	10	10	8	7	-	8	-	67	4
	=	-	i	67	တ	က	4	i	ಣ	-	-	-	67	ដ
	01	1		10	Ī	-	က	•	က		-	00	4	8
Ä		80	60	9	Н	00	က	70	-		61	-	87	8
P. M.	00		67	-	-	œ	61	61	4		7	-		ន
	7	8	က	4	7	9	က	60	9	-	-	4	69	4
	9	60	61	က	9	61	4	10	н	ಣ	-	က	2	#
tal larma,	To A vad	17	20	15	56	8	8	g	14	83	14	13	33	266
	6ء	8	67	-	63	10	61	61	60	-	4	60	7	8
i	4		•	00	4	-	60	61	-	cq		-	8	22
Ä	60		-	-	8	61	-	61	61	-	-	-	10	12
P. M.	61		-	Ī	•	6	-	61	-	7	67	-		27
	Ħ	-		က	61	69	20	-	-	-	-	5	i	क्ष
•	12	-	-	61	П	*	•	4	-	-	61	-	*	22
	=		-	-	61		8	-		-	-	29	9	ล
	9	8	•	67	60	:	7	60	တ			7	87	23
Ä,	6	4	7	-	8		20	4		-	64	-	-	22
A. M.	<b>6</b> 0	-	-	-	တ	80	-	61		67		-		15
	7	67	-		-		7	-	61	4		-	64	15
	9	7	5				ဆ			-	-	35	4	12
Months.		anuary	ebruary	darch	April	Мау	June	'uly	August	eptember	October	November	Эесет ber	Total

Showing the number of Alarms from each Box during the year 1891.

Boxes.	Alarms.	Boxes.	Alarms.	Boxes.	Alarms.	Boxes.	Alarms.	Boxes.	Alarms.	Boxes.	Alarms.	Boxes.	Alarms.	Boxes.	Alarms.	Total.
2	-	79	1	172	-	254	- 1	336	-	417		488		571	1	
3	4	81	2	173	1	255		337		418		489		572		ĺ
4	2	82 83	1 3	174 175	1	256 257		388 389		419 421	1	491 492	1	573 574	6	
5 6 7	1	84	3 1	176 177	5	258	3	341	1.11	422		493	1	575	1	
7		85	3	177 178		259 261	<u>2</u>	342 343	1	423 424	2	494 495		576 577	1	
8	1	86 87	1	179		262	2	344	1	425		496	1	578		
12	9	8.3	1	181		263	1	345	*****	426	1	497		579		
13 14	•••••	91 92	10 1	182 183	1	264 265	1	346 347	*****	427 428	i	498 499	1	581 582		
15	4	93		184		266		348	4	429	5	512		583		
16 17	2	94 95	1	185 186	3 5	267 268	····i	349 351	1	431 432	3 2	513 514	4	584 585		
18		96		187		269		352	5	433		515		586	1	
19	1	97	2	188	10.0	271 272	2	353 354	****	434 435	1	516 517	1	587 588	****	
21 23 24	···i	98 121	1	189 191	297	273	1	355	*****	436	1	518	4	589	1	
24		122		192	***	274	3	356	1	437	2	519		591	*****	
25 26	4	123 124	5	193 194	1	275 276		357 358	1	438 439	1	521 522	3	592 593	1	
27 28 29	1	125		195		277		359		441		523		594		
28	2	126 127	2	196 197	1	278 279	2 1	361 362	1	442 443		524 525	2	595 596	1	
31	4	128		198	2	281	1	363	1	445		526		597	1	
32		129	2	199		282	2 2	364		446		527	8	598	1	
34 35	1 2	131 132		212 213	1	283 284	3	365 366	1	447 448		528 529	2	599 612	******	
36	2	133		214	117	285	1	367	····i	449		531	*****	613	1	
37 88	2	134 135	1	215 216		286 287		368 369	1	451 452	1	532 533		614 615		
39	5	136		217	1	288		371	1	453	1	534		616	i	
41 .		137		218	2	289		372		454	1	535	*****	617	<u>.</u>	
42 43	3	138 139	1	219 221	1	291 292	7	373 374	i	455 456		536 537	1	618 619	2	
45	4	141	3	223		293	***	375	1	457		538	1	621	2	
46 47	·····i	142 143	1 2	224 225		294 295	1 2	376 377		458 459	1	539 541	*****	622 623		
48	i	144		226		296		378		461	2	542		624 625	i	
49 51	•••••	145 146	4	227 228	5	297 298	1	379 381	2	462 463	4	543 544	****	625 626		
52	1	147	2	228	1	299	***	382		464	1	545	8	627		
53	2	148	2 1	231	2	312		383	1	465		546		628		
54 56.	3	149 151	1	232 233		313 314	1	384 385	2	466 467	1	547 548	1	629 631	1	
57 .		152	1	234	3	315	3	386	2	468		549		632	2	
58 59 .	8	153 154	4	235 236	5 2	316 317	3	387 388		469 471	2	551 552		633 634		
61	1	155	1	237	2	318	***	889	1	472	2	553	*****	635	2	
62	1	156		238	2 2 1	819	1	391	2	473	•••••	554		636		
63 64	3	157 158	3	239 241	2	321 322	1	392 393	7	474 475	2	556 557		637 638		
85	2	159	1	242	2	323	2	394	i	476	ī	558		689	1	
67 . 68 .		161 162	2	243 244		324 325	i	395 396		477 478		559 561	i	641 642	1	
69 l	1	163	2	245		326		397		479		562	2	643	2	
71 72	13	164		246 247		327 328	2	398	3	481 482	8	563	*****	644	····2	
73   .	3	165 166		248	1¦	828 829		399 412	i	482	1	564 565	1	645 646	1	
74 .		167	1	249		331		413		484	1	566	*****	647	ī	
75 76	5	168 169	1 2	251 252	1 3	332 334	1	414	*****	485 486	6	567 568	1	648 649	2	
78	-	171	2	253		335	*****	416	2	487		569		651	[	

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## Showing the number of Alarms—Continued.

665         716         755         795         1         845         885         936         975         1           667         717         756         3         796         846         886         987         976         1           668         718         1         757         2         797         847         887         938         977         1           669         719         758         798         848         889         994         1         979         849         891         941         1         979         9         848         889         994         1         1979         9         942         981         2         91         1         979         9         942         981         2         983         985         981         941         1         979         942         981         2         981         2         983         984         989         941         1         979         942         981         2         983         948         989         944         983         984         984         989         944         983         984         984         984         984	653 66 659 2 66 659 2 66 659 2 66 659 2 66 659 2 66 659 2 66 669 77 662 77 667 77 667 77 667 77 667 4 77 675 8 77 675 8 77 675 8 77 678 2 77 678 2 77 681 1 77 683 1 77 683 1 7 684 77 683 1 7 684 77 681 1 7 686 8 7 7 687 8 7 688 1 1 7 7 688 1 1 7 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	693 2 694 695 696 697 698	744 745 1 746	783 1 784	833	871		962	
654         1         684         744         1         784         834         873         925         964           655         685         745         1         785         835         874         925         965           657         2         697         747         786         836         1         875         927         966         965           688         688         748         1         788         838         3         877         922         968         1           659         2         699         749         1         788         838         3         877         929         968         1           659         2         699         749         1         789         839         878         931         969         1           661         712         751         791         841         879         932         1         971           663         713         1         753         1         793         1         843         883         934         973           663         716         753         1         794         1         844         88	654 1 656 2 6656 2 6656 2 6657 2 6658 3 77 662 7 7 662 7 7 664 7 7 6658 7 7 664 7 7 6658 7 7 664 7 7 6658 7 7 664 7 7 6658 7 7 664 7 7 6658 7 7 664 7 7 6658 7 7 664 7 7 6658 7 7 7 6658 7 7 7 6658 7 7 7 6658 7 7 7 6658 7 7 7 6658 7 7 7 6658 7 7 7 7 6658 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	694 695 696 697 698	744 745 1 746	784	833	979			
654         1         684         744         1         784         834         873         925         964           655         685         745         1         785         835         874         925         965           657         2         697         747         786         836         1         875         927         966         965           688         688         748         1         788         838         3         877         922         968         1           659         2         699         749         1         788         838         3         877         929         968         1           659         2         699         749         1         789         839         878         931         969         1           661         712         751         791         841         879         932         1         971           663         713         1         753         1         793         1         843         883         934         973           663         716         753         1         794         1         844         88	658	694 695 696 697 698	744 745 1 746	784		1 0 1 4 1	924	963 3	1
658         698         748         1         788         838         3         877         929         988         1           669         749         1         789         839         878         931         969         1           661         712         5         752         2         792         842         881         933         972           662         713         5         752         2         792         842         881         933         972           664         715         754         794         1         843         883         984         973         973           664         716         755         795         1         845         885         935         974         973         984         973         973         98         98         976         1         98         987         976         1         845         885         935         974         973         98         846         886         987         976         1         845         885         938         977         976         1         845         885         938         978         978         978	658	696 697  698	746	7051	834			964	l
658         698         748         1         788         838         3         877         929         988         1           669         749         1         789         839         878         931         969         1           661         712         5         752         2         792         842         881         933         972           662         713         5         752         2         792         842         881         933         972           664         715         754         794         1         843         883         984         973         973           664         716         755         795         1         845         885         935         974         973         984         973         973         98         98         976         1         98         987         976         1         845         885         935         974         973         98         846         886         987         976         1         845         885         938         977         976         1         845         885         938         978         978         978	658	697 698 699		100	835		926	965	ĺ
658         698         748         1         788         838         3         877         929         988         1           669         749         1         789         839         878         931         969         1           661         712         5         752         2         792         842         881         933         972           662         713         5         752         2         792         842         881         933         972           664         715         754         794         1         843         883         984         973         973           664         716         755         795         1         845         885         935         974         973         984         973         973         98         98         976         1         98         987         976         1         845         885         935         974         973         98         846         886         987         976         1         845         885         938         977         976         1         845         885         938         978         978         978	658	698				875	927	966	ĺ
659         2         669         749         1         789         839         878         931         969         1           661         712         751         791         841         879         932         1         971           662         713         5         752         2         792         842         881         933         972           683         714         1         753         1         794         1         844         884         993         973           665         716         755         795         1         845         885         936         974           667         717         756         3         796         846         886         937         976           669         719         758         798         848         889         939         978           671         1         721         2         797         847         887         988         977           689         719         758         798         848         889         939         978           671         1         721         2         761         812	659 2 6661 77 6662 77 6665 77 6668 77 676 8 77 77 678	699		787		876	928	967 1	İ
661 713 5 752 2 792 842 881 933 1 971 662 713 5 752 2 792 842 881 933 972 863 973 974 975 975 975 975 975 975 975 975 975 975	662 77 663 77 664 77 665 77 666 77 671 1 7 673 77 674 77 678 2 7 677 677 8 7 678 1 7 688 1 7 6	699	748 1	788	838 3	877	929	968 1	ĺ
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		Sent.	625	276	673	848	719	662	616	626	999	919	664	685	7,745
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*8	umber of message	Total n	1,183	086	1,207	1,192	1,300	1,242	1,193	1,161	1,256	1,230	1,264	1,405	14,613
	Months.		January	February	March	April	Маў	June	July	August	September	October	November	December	Total

## Number of Miles of Overhead and Underground Wires.

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Overhead.	Number of miles on City Poles.	Number of miles on other poles.	No. of miles on fixtures & buildings.	Total.
	10.00		96	00 5
American District Telegraph Co American Rapid Telegraph Company American Telegraph & Telephone Co.	12.08	.5 1 <b>1.</b> 51	86.	98.5 17.4
merican Rapid Telegraph Company	5.96	49.62	78,94	128.5
merican Telegraph & Telephone Co.	1.5	2.25		8.7
Ammonia Company of Philadelphia Atlantic and Pacific Telegraph Co	1.0	14.34	•••••	14.8
tiantic and Pacine Telegraph Co	10.	10.	12.	82.
Atlantic Refining Company	4.	10.	12.	4.
Baeder & Adamson Company Saltimore & Ohio Telegraph Co Bankers & Merchants Telegraph Co Sell Telephone Co. of Philadelphia	13.6	•••••		13.6
Sankore & Marchants Telegraph Co	10.0	851.	20.	371.
call Telephone Co. of Philadelphia	96.	456.95	788.9	1,341.8
Brush Electric Light Company	56.8	108.7		165.5
heltenham Electric Light. Heat and				
Power Company		4.62		4.6
Diamond Electric Company		20.31	.55	20.8
Clkinton, Joseph S. and Thomas	3.13	.12	.25	3.5
rankford Avenue Merchants Electric			_	_
Light Company			3.	3.
Light Company  rankford Electric Light & Power Co  ermantown Electric Light Company  drard Point Storage Company  Harrison Brothers & Company	.63	20.41	[. <b></b> ]	21.0
lermantown Electric Light Company	5.56	40.96		46.5
irard Point Storage Company	3.	10.		13.
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HICKEIDOCKEI ICE COMPAN)	21.			21. 18.
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North Front Street		1. 371.74	3.	371.7
Autual Union Telegraph Company	39.	571.74 54.		93.
forthern Electric Light and Power Co	9.87	73.	2.25	85.2
Northern Electric Light and Power Co cennsylvania Railroad Company chiladelphia Electric Light Company	28.	26.	2.20	54.
Philadelphia Illuminating Company	20.	20.		
(Limited)	1.84			1.8
Philadelphia Local Telegraph Co	9.1	25.3	11.1	45.5
Philadelphia Local Telegraph Co	3.	56 84		59.8
Philadelphia Reading & Pottsville	, ,			
Philadelphia, Reading & Pottsville Telegraph Company Owelton Electric Company	19.27	116.31		135.5
Powelton Electric Company	6.9	39.6		46.5
outhern Electric Light & Power Co.	14.66	23.1		37.70
uburban Electric Company		52.79		52.79
Inited States Electric Light Company	17.32	57.91		75.2
Inited States Electric Light Company	17.32 1.95	57.91 788.11 .		785.0
Jnited States Electric Light Company Vestern Union Telegraph Company Vissahickon Electric Company	17.32 1.95 3.3	57.91		75.23 785.0 7.5
Inited States Electric Light Company	1.95 3.3	57.91 788.11 . 4.28	1 007 07	785.0 7.5
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Juited States Electric Light Company Vestern Union Telegraph Company Vissahickon Electric Company	1.95 3.3	57.91 788.11 . 4.28	1,007.07	785.0 7.5 4,208.73 837.73
Juited States Electric Light Company Vestern Union Telegraph Company Vissahickon Electric Company	392.47	57.91 788.11 . 4.28		785.0 7.5 4,208.73 837.73
Inited States Electric Light Company Vestern Union Telegraph Company Vissahickon Electric Company  ity Wires  Total Overhead Wires	1.95 3.3 392.47	77.91 788.11 4.28 2,809.19 Telephone & Telegraph	1,007.07	785.0 7.5 4,208.73 837.7
Inited States Electric Light Company Vissanickon Electric Company ity Wires	392.47	57.91 788.11 4.28 - 2,809.19		785.0 7.5 4,208.73 837.7
United States Electric Light Company Vestern Union Telegraph Company Vissahickon Electric Company  City Wires  Total Overhead Wires  Underground.	1.95 3.3  392.47  Electric light wires.	77.91 788.11 4.28  2,809.19  Telephone & Telegraph Wires.	Total.	785.0 7.5 4,208.73 837.7
United States Electric Light Company  Western Union Telegraph Company  Wissahickon Electric Company  City Wires  Total Overhead Wires  Underground.	1.95 3.3  392.47  Electric light wires.	77.91 788.11 4.28 2,809.19 Telephone & Telegraph	Total.	785.0 7.5 4,208.73 837.73
United States Electric Light Company. Western Union Telegraph Company. Wissahickon Electric Company  City Wires  Underground.  American Telegraph & Telephone Co. Brush Electric Light Company	1.95 3.3 392.47 Electric light wires.	77.91 788.11 4.28  2,809.19  Telephone & Telegraph Wires.	Total.	785.0 7.5 4,208.73 837.73
United States Electric Light Company  Western Union Telegraph Company  Sity Wires  Total Overhead Wires  Underground.  American Telegraph & Telephone Co.  Srush Electric Light Company	Electric light wires.	77.91 788.11 4.28  2,809.19  Telephone & Telegraph Wires.	Total.  843.76 1. 5.3	785.0 7.5 4,208.73 837.73
United States Electric Light Company.  Vestern Union Telegraph Company.  Vissahickon Electric Company.  Total Overhead Wires.  Underground.  American Telegraph & Telephone Co.  Strush Electric Light Company.	Electric light wires.	77.91 788.11 4.28  2,809.19  Telephone & Telegraph Wires.	Total.	785.0 7.5 4,208.73 837.73
United States Electric Light Company.  Vissenhickon Electric Company.  Vissahickon Electric Company.  Total Overhead Wires.  Underground.  American Telegraph & Telephone Cosrush Electric Light Company.  Olumbia Electric Light Company.  John Electric Light Company.  John Electric Light Company.  John Electric Light Company.  John Electric Light Company.  John Electric Light Company.  John Electric Light Company.  John Electric Light Company.	1.95 3.3 392.47 Electric light wires. 1.5.3 92.2	77.91 788.11 4.28  2,809.19  Telephone & Telegraph Wires.	Total.  843.76 1. 5.3 92.2	785.0 7.5 4,208.73 837.73
Underground.  Underground.  Underground.  Underground.  Underground.  Underground.  Underground.  Underground.  Underground.  Underground.  Underground.  Underground.  Underground.  Underground.	1,95 3,3 392.47  Electric light wires.  1. 5.8 92.2 3.	77.91 788.11 4.28  2,809.19  Telephone & Telegraph Wires.	Total.  843.76 1. 5.3 92.2 3.	785.0 7.5 4,208.73 837.73
United States Electric Light Company Vestern Union Telegraph Company Vissahickon Electric Company Vissahickon Electric Company  Underground.  Underground.  American Telegraph & Telephone Co. Brush Electric Light Company  Columbia Electric Light Company  Trankford Avenue Merchants Electric  Light Company  Virard Estate.	Electric light wires.  1. 5.3 92.2  3. 1.40	78.11 4.28 2,809.19 Telephone & Telegraph Wires.	Total.  843.76 1. 5.3 92.2 3. 1.40	785.0 7.5 4,208.73 837.73
United States Electric Light Company Vestern Union Telegraph Company Vissahickon Electric Company Vissahickon Electric Company  Underground.  Underground.  American Telegraph & Telephone Co. Brush Electric Light Company  Columbia Electric Light Company  Trankford Avenue Merchants Electric  Light Company  Virard Estate.	Electric light wires.  1. 5.3 92.2  3. 1.40	77.91 788.11 4.28  2,809.19  Telephone & Telegraph Wires.	Total.  843.76 1. 5.3 92.2 3. 1.40 365.05	785.0 7.5 4,208.73 837.73
Underground.  Underground.	Electric light wires.  1. 5.3 92.2 3. 1.40 11.15	78.11 4.28 2,809.19 Telephone & Telegraph Wires.	843.76 1. 5.3 92.2 3. 1.40 365.05 11.15	785.0 7.5 4,208.73 837.73
Vistern Union Telegraph Company.  Vissahickon Electric Company.  Vissahickon Electric Company.  Total Overhead Wires.  Underground.  American Telegraph & Telephone Cosrush Electric Light Company.  John Electric Light Company.  John Electric Light Company.  John Electric Light Company.  John Electric Light Company.  John Electric Light Company.  John Electric Light Company.  John Electric Light Company.  John Electric Light Company.  John Electric Light Company.  John Electric Light Company.  John Electric Light Company.  John Electric Light Company.  John Electric Light Company.  John Electric Light Company.  John Electric Electric Company.  John Electric Electric Company.  John Electric Company.	1.95 3.3  392.47  Electric light wires.  1. 5.3 92.2 3. 1.40 11.15 1.25	78.11 4.28 2,809.19 Telephone & Telegraph Wires.	Total.  843.76 1. 5.3 92.2 3. 1.40 365.05	785.0 7.5 4,208.73 837.73
Vistern Union Telegraph Company.  Vissahickon Electric Company.  Vissahickon Electric Company.  Total Overhead Wires.  Underground.  Light Company.  Light Company.  John Electric Light Company.  John Electric Light Company.  John Electric Light Company.  John Electric Light Company.  John Electric Light Company.  John Electric Light Company.  John Electric Light Company.  John Electric Light Company.  John Electric Light Company.  John Electric Light Company.  John Electric Light Company.  John Electric Light Company.  John Electric Light Company.  John Electric Light Company.	1,95 3,3 392,47  Electric light wires.  1, 5,3 92,2 3, 1,40 11,15 1,25	78.11 4.28 2,809.19 Telephone & Telegraph Wires.	Total.  843.76 1. 5.3 92.2 3. 1.40 365.05 11.15 1.25	785.0 7.5 4,208.73 837.73
Vissanickon Electric Light Company. Vissanickon Electric Company. Vissanickon Electric Company.  Total Overhead Wires.  Underground.  American Telegraph & Telephone Co. Brush Electric Light Company.  Jolumbia Electric Light Company.  Jolumbia Electric Light Company.  Trankford Avenue Merchauts Electric  Light Company.  Jirard Estate.  Henry C. Gibson et al.  Leystone Light & Power Company.  Manufacturers Electric Company.  Manufacturers Electric Company.  Manufacturers Electric Company.  Merchants Electric Light Company of	Electric light wires.  1. 5.3 92.2 3. 1.40 11.15 1.25 9.3	78.11 4.28 2,809.19 Telephone & Telegraph Wires.	843.76 1. 5.3 92.2 3. 1.40 365.05 11.15	785.0 7.5 4,208.73 837.73
Underground.  Total Overhead Wires.  Underground.	Electric light wires.  1. 5.3 92.2 3. 1.40 11.15 1.25 9.3	78.11 4.28 2,809.19 Telephone & Telegraph Wires.	Total.  843.76 1. 5.3 92.2 3. 1.40 365.05 11.15 1.25 9.3	785.0 7.5 4,208.73 837.73
Underground.  Total Overhead Wires.  Underground.	Electric light wires.  1. 5.3 92.2 3. 1.40 111.15 1,25 9.3	78.11 4.28 2,809.19 Telephone & Telegraph Wires. 843.76	843.76 1. 5.3 92.2 3. 1.40 365.05 11.15 1.25 9.3	785.0 7.5 4,208.73 837.73
Underground.  Total Overhead Wires.  Underground.	Electric light wires.  1. 5.3 92.2 3. 1.40 11.15 1.25 9.3	78.11 4.28 2,809.19 Telephone & Telegraph Wires.	Total.  843.76 1. 5.3 92.2 3. 1.40 365.05 11.15 1.25 9.3	785.0 7.5
Vissen Licetric Light Company Vissen Licetric Company Vissen Electric Company Vissen Electric Company  Total Overhead Wires  Underground.  Underground.  Underground  Telephone Co.  Grush Electric Light Company  Jolumbia Electric Light Company  Jolumbia Electric Light Company  Jolumbia Electric Light Company  Jolumbia Electric Light Company  Jolumbia Electric Light Company  Jolumbia Electric Light Company  Jolumbia Electric Light Company  Jolumbia Electric Light Company  John Company  John Company  John Company  North Front Street  John Company  John Street  John Company  Light & Power Company  North Front Street  John Company  Light & Power  Light &	Electric light wires.  1. 5.3 92.2 3. 1.40 111.15 1,25 9.3	78.11 4.28 2,809.19 Telephone & Telegraph Wires. 843.76	843.76 1. 5.3 92.2 3. 1.40 365.05 11.15 1.25 9.3	785.0 7.5 4,208.73 837.7

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## Summary of Underground Conduits.

COMPANIES, FIRMS AND CORPORATIONS.	No. of Conduits.	Length in Feet.	No. of Ducts.	Length in Feet.	Miles of Ducts.
American Telegraph and Telephone Company	72	261,994	628	1,925,812	364.73
Bell Telephone Company, of Philadelphia	317	89,476	3,432	1,127,047	213.45
Columbia Electric Light Company	3	7,202	18	43,212	8.18
Drexel & Company	1	559	İ		
Edison Electric Light Company	265	65,514	283	162,289	30.73
Edison Electric Light Company, (for City use)	21	6,226	35	11,543	2.18
Frankford avenue Merchants' Electric Light Co	3	7,650	27	68,850	13.03
Girard Estate	1	5,250	4	21,000	3.09
Henry C. Gibson, et al	7	24,372			
Keystone Light and Power Company	20	5,548			
Manufacturers' Electric Company	7	6,400	47	48,300	9.13
Merchants' Electric Light Co., of N. Front street.	69	6,277	137	38,160	7.18
Penn Electric Light Company	28	39,820	181	434,627	82.31
Penn Electric Light Company, (for City use)	25	32,666	25	32,666	6,18
Philadelphia, Reading & Pottsville Telegraph Co	5	1,014			
Strawbridge & Clothier	1	45			
Underground Electric Light and Power Company	. 8	26,426	37	107,261	20.31
City	21	59,030	129	278,480	52.73
Total	874	645,464	4,978	4,299,247	814.04

Return of license charges for attachments to City poles, maintenance of poles, erection of poles, and mileage of wires overhead for the year 1891.

	Attachments	ments.	Maintenance of poles.	ance of	Erection of poles.	of poles.	Wires on City poles.	City poles.	Wire on other poles and buildings.	ther poles	Total.	.ia;	Total
	Paid.	Unpaid.	Paid.	Unpaid.	Paid.	Unpaid.	Paid.	Unpaid.	Paid.	Unpaid.	Paid.	Unpaid.	charges.
American District Telegraph Co  Annerican Rapid Telegraph Co  Annerican Relphone and Telegraph Co  Annerian Telephone and Telegraph Co  Atlantic and Facilo Telegraph Co  Allantic and Facilo Telegraph Co  Backer, Adanson & Co  Backer, Adanson & Co  Ballinore & Ohio Telegraph Co  Ballinore & Ohio Telegraph Co  Ballinore & Company, of Philadelphia  Bell Telephone Company, of Philadelphia  Bell Telephone Company, of Philadelphia  Bell Telephone Company, of Philadelphia  Bell Telephone Company, of Philadelphia  Bell Telephone Electric Light, Go. Prover Co  Electric Light and Power Co  Electric Light and Power Co  K nickerbocker Ice Co  Mutual Union Telegraph Co  Harison Peterric Light Co  Fulledelphia Electric Light Co  Philadelphia Electric Light and Power Co  Philadelphia Electric Light and Power Co  Philadelphia Electric Light and Power Co  Philadelphia Electric Light and Power Co  Philadelphia Electric Light and Power Co  Philadelphia Electric Light and Power Co  Philadelphia Electric Light and Power Co  Englisher Electric Light and Power Co  Western Union Telegraph Co  Western Union Telegraph Co  Western Union Telegraph Co  Western Union Telegraph Co  Western Union Telegraph Co  Western Union Telegraph Co  Western Union Telegraph Co  Western Union Telegraph Co  Western Union Telegraph Co  Western Union Telegraph Co  Western Union Telegraph Co  Western Union Telegraph Co  Western Union Telegraph Co  Western Union Telegraph Co  Western Union Telegraph Co  Western Union Telegraph Co	\$208 50 246 00 28 00 28 00 1,450 00 1,455 00 1,661 00 23 00 242 00 242 00 253 00 253 00 254 00 255 0	0.09 8918	\$8 00 6 00 9 9 00 106 00 106 00 106 00 108 00 228 00 228 00 228 00 35 00	\$888 00 00 2988 00 00 00 00 00 00 00 00 00 00 00 00 0	\$380 00 1,215 00 220 00 655 00 706 00 1,665 00 1,865 00 1,865 00 1,865 00 1,865 00 1,865 00 1,865 00 1,865 00 1,865 00 1,865 00		\$82 50 5 00 . 120 00 1 50 00 1 50 00 1 50 00 1 50 00 1 50 00 1 50 00 1 60 00 1 7 00 1 8 00 1 9 0 00 1 15 00	\$15 00 85 00 242 50	\$227 50 \$7 50	\$240 000 30 000 87 50 00 5,072 50 736 00 845 00 845 00 382 50 159 70 00	\$246 900 246 9	8240 00 188 00 1476 00 1,572 00 1,572 00 1,572 00 1,486 00 1,486 00 1,488 00 1,523 50 1,523 50 1,523 50 1,523 50 1,523 50 1,523 50	\$4.50 00 88.4 00 88.4 00 88.4 00 88.4 00 88.4 00 88.4 00 88.5
	\$6,594 00	\$163 50	\$1,870 00	\$4,449 00	\$7,515 00		\$945 00	\$327 50	1,237 50	\$10,792 50	1,237 50 \$10,792 50 \$18,161 50 \$15,732 50	\$15,732 50	\$33,894 00

Appropriation to the Department of Public Safety (Electrical Bureau) with the Expenditures and Balances for the year 1891.

Item.	·	Amount appropria'd.	Amount expended.	Balance.
	For salary of Chief, \$4,000; manager, \$2,500; assistant manager, \$1,500; clerk, \$1,500; assistant clerk, \$800; draughtsman, \$1,000; six inspectors, \$1,080 each, and \$40 for uniforms each; sixteen operators, \$1,000, and \$40 for uniforms each; foreman, \$900, and \$40 for uniforms seven linemen, \$850 each, and \$40 for uniforms each; batteryman, \$900; assistant batteryman and plumber, \$1,000, and \$40 for uniforms; two janitors, \$250 each.	<b>\$44</b> ,270 00	<b>\$44</b> ,153 29	\$116 71
2	For repairs, instruments, supplies and labor\$12,000 00 Transfer November 11, 1891 2,000 00	14.000.00	10.004.40	15.00
3	For maintenance and keep of horse and	14,000 00	13,984 40	15 60
4	wagons	500 00	500 00	
5	For stationery, printing, advertising and incidentals	6,000 00	5,998 67	1 33
		2,300 00	2,299 65	35
6	For painting telegraph poles, cross-arms and patrol houses	1,500 00	1,499 98	02
7 8	For fuel and ice		53 41	71 59
9	For rental of telephones and purchase of materials and instruments, and exten- sion of the lines and hospital and arm- ory service, including Presbyterian, St. Mary's Children's Homeopathic, Hahne- mann, St. Timothy's and St. Joseph's Hos-		10,237 75	*755 55
10	For the extension of the police signal and	8,800 00	8,781 50	18 50
	telephone service	10,000 00	9,999 61	39
12 1 <b>3</b>	For rental of store-house	37,570 15 500 00	35,762 59 399 96 7,578 77	*1,807 56 100 04 221 23
	Total	\$144,358 45	\$141,249 58	\$3,108 87
	*Carried over to Books of 1892.	,	,	,

